WATER SUPPLY OUTLOOK FOR OREGON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE···SOIL CONSERVATION SERVICE

and

OREGON STATE UNIVERSITY

and

STATE ENGINEER of OREGON

Data included in this report were obtained by the agencies named above in cooperation with other Federal, State and private organizations.

AS OF
FEB. 1, 1968

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season as they affect runoff will add to be an effective average. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data or reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

D. A. WILLIAMS, Administrator

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 507, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85205
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	P. O. Box 38, Boise, Idaho 83707
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Building, Salt Lake City, Utah 84111
Washington	360 Federal Office Building, Spokane, Washington 99201
Wyoming	P. O. Box 340, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

USDA-SCS-PORTLAND, OREG. 1966

WATER SUPPLY OUTLOOK FOR OREGON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued

FEBRUARY 8, 1968

Issued by

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SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

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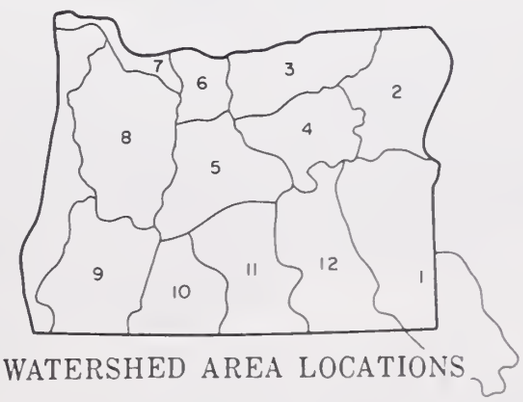
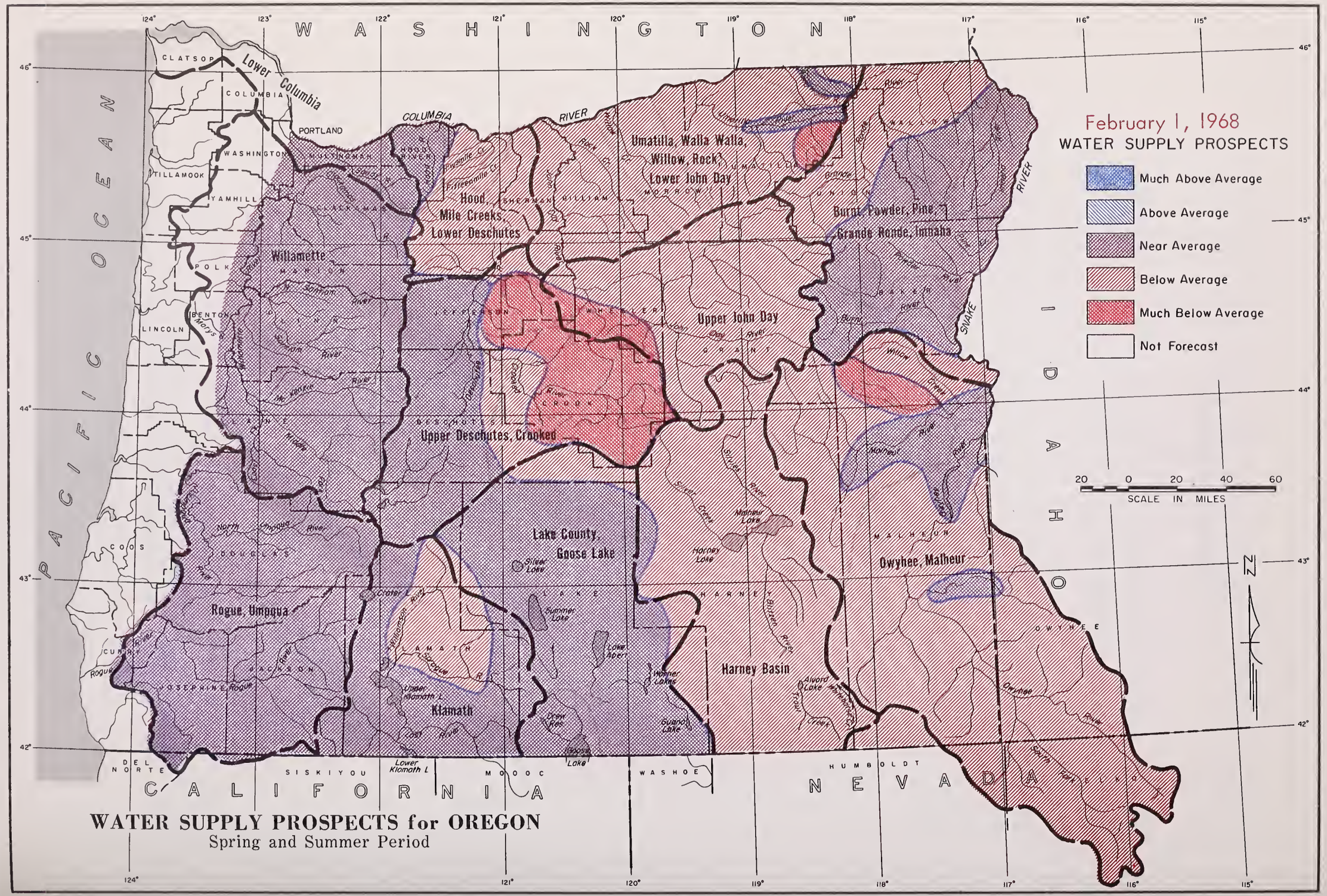


WATERSHED AREA LOCATIONS



WATER SUPPLY PROSPECTS for OREGON
Spring and Summer Period

WATER SUPPLY OUTLOOK for OREGON

February 1, 1968

Oregon's 1968 water supplies are forecast to range from poor to near average in the coming spring and summer months.

This is the outlook if the balance of the winter has normal temperatures and precipitation. But if the present trend of abnormally warm temperatures continues, most of any precipitation that occurs will fall as rain, not as snow, and the summer season streamflow will be further reduced by the lack of snowmelt water.

About two-thirds of Oregon's irrigated lands, without storage water, will have "short" water supplies or even very deficient supplies this year. The remaining irrigated lands will have a near average water supply because of available reservoired water. Serious shortages of water are probable for lands served from McKay Reservoir in Umatilla County, Bully Creek Reservoir in Malheur County, and most of Crook County upstream from major reservoirs, plus Hay and Trout Creeks in eastern Jefferson County and Mountain and Bridge Creeks on the John Day River in Wheeler County.

SNOW COVER

Water content of the mountain snowpack varies from 65 to 95 percent of the February 1 average in the western Cascades, in Klamath and Lake Counties and in the Wallowa Mountains of northeastern Oregon. Elsewhere the snowpack is extremely poor and varies from 45 to 62 percent of the average. It is highly unlikely that the snow shortage will be made up between now and April first.

PRECIPITATION

Winter precipitation, November first to February first, ranges from 55 and 56 percent average in the Deschutes-Crooked and Harney Lake areas on up to 73 and 74 percent average in the extreme Southwest and Northeast corners of the State according to the U. S. Weather Bureau.

SOIL MOISTURE

Soils under the mountain snowpacks, especially in Eastern Oregon, are very near the low record in moisture content. These soils will absorb from 3 to 9 inches of snowmelt water next spring before substantial streamflow begins.

continued--

RESERVOIR STORAGE

Water stored in 25 Oregon irrigation reservoirs totals 1,582,600 acre feet or 98 percent of the average for February first. This is 32,500 acre feet more last year on this date. Storage water will truly "save the day" for many acres of irrigated land this season.

STREAMFLOW

Flow of Oregon streams next spring and summer is expected to be very near average to greatly below average, unless remaining winter storms cause additional snow accumulation greatly in excess of the usual amounts.

The following representative forecasts are compared with the 15-year average (1948-62) and are made on the assumption of near average conditions of temperature and precipitation for the next five months:

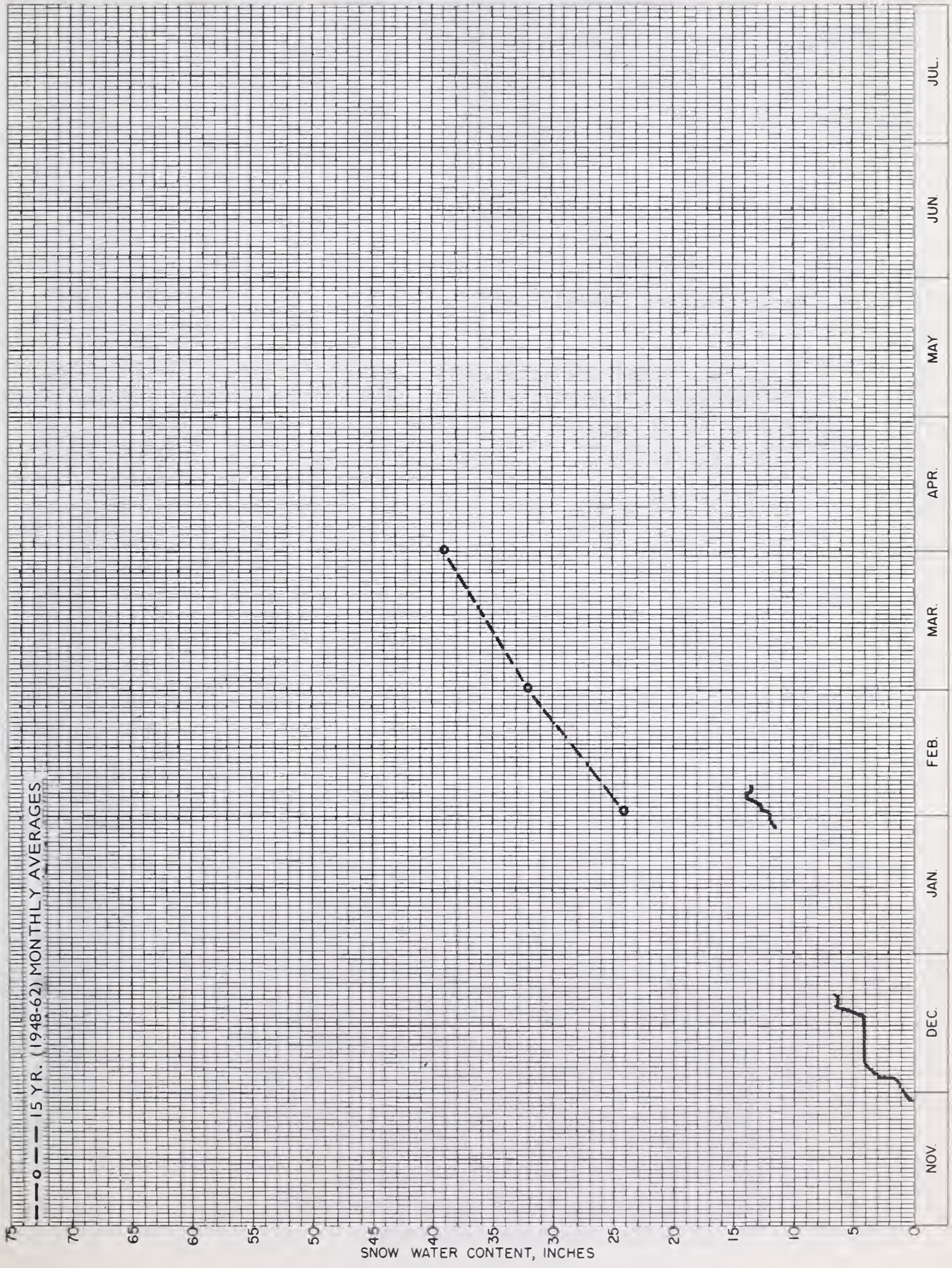
Stream Station	Period	Percent Average
Inflow to Owyhee Reservoir	February-July	37
Malheur R. near Drewsey	February-July	66
Burnt R. near Hereford	February-June	75
Powder R. near Baker	April-September	84
Lostine R. near Lostine	April-September	96
Grande Ronde at La Grande	April-September	59
South Fork Walla Walla River	April-September	78
Umatilla R. at Pendleton	March-September	77
John Day R. at Prairie City	April-September	70
Crooked R. near Post	February-July	55
Deschutes R. at Benham Falls	April-September	69
Hood River near Hood River	April-September	71
Willamette R. at Salem	April-September	90
North Umpqua below Lemolo	April-September	77
Rogue R. at Raygold	April-September	81
Inflow to Upper Klamath Lake	February-September	61
Chewaucan R. near Paisley	March-June	84
Drews Reservoir Inflow	March-July	98
Silvies R. near Burns	March-June	52

U. S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

USDA-SOIL CONSERVATION SERVICE DAILY RADIO REPORTS (8:00 A.M.)
by

COLD SPRINGS CAMP
AUTOMATIC SNOW STATION

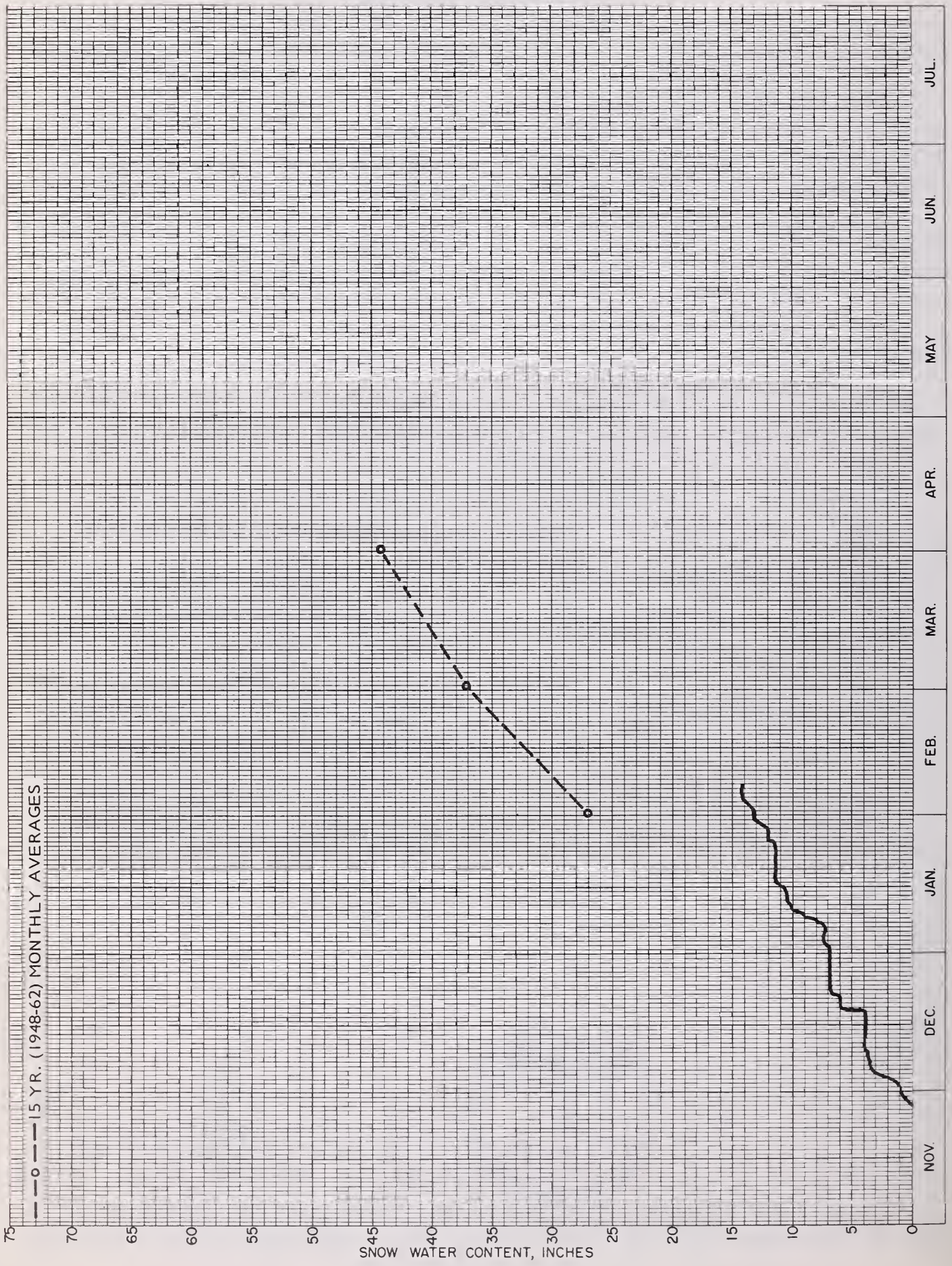
KLAMATH RIVER WATERSHED
AT 6100 FEET ELEVATION



USDA-SOIL CONSERVATION SERVICE DAILY RADIO REPORTS (8:00 A.M.)
by

IRISH-TAYLOR
AUTOMATIC SNOW STATION

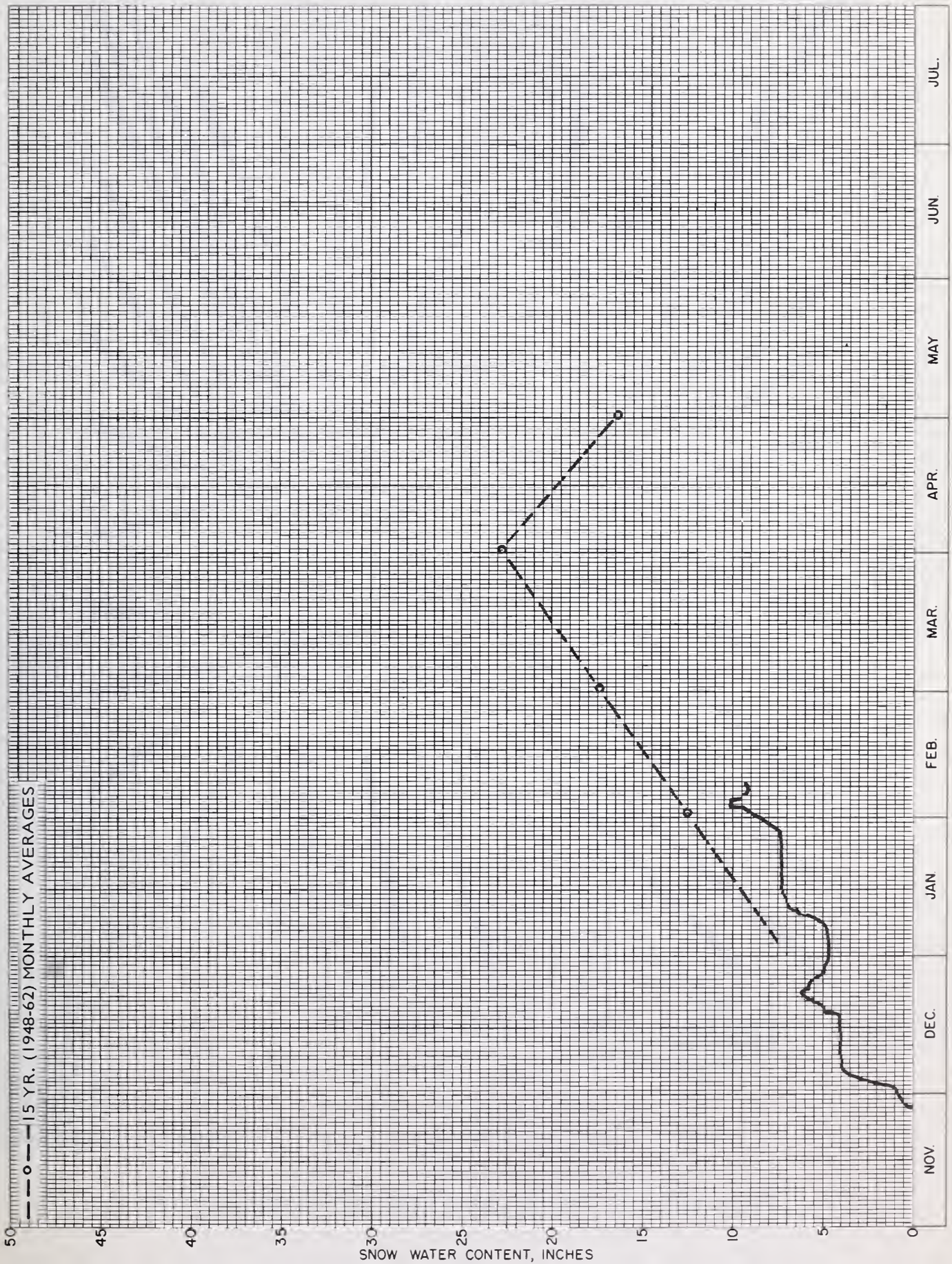
UPPER DESCHUTES RIVER WATERSHED
AT 5500 FEET ELEVATION



USDA-SOIL CONSERVATION SERVICE DAILY RADIO REPORTS (8:00 A.M.)
by

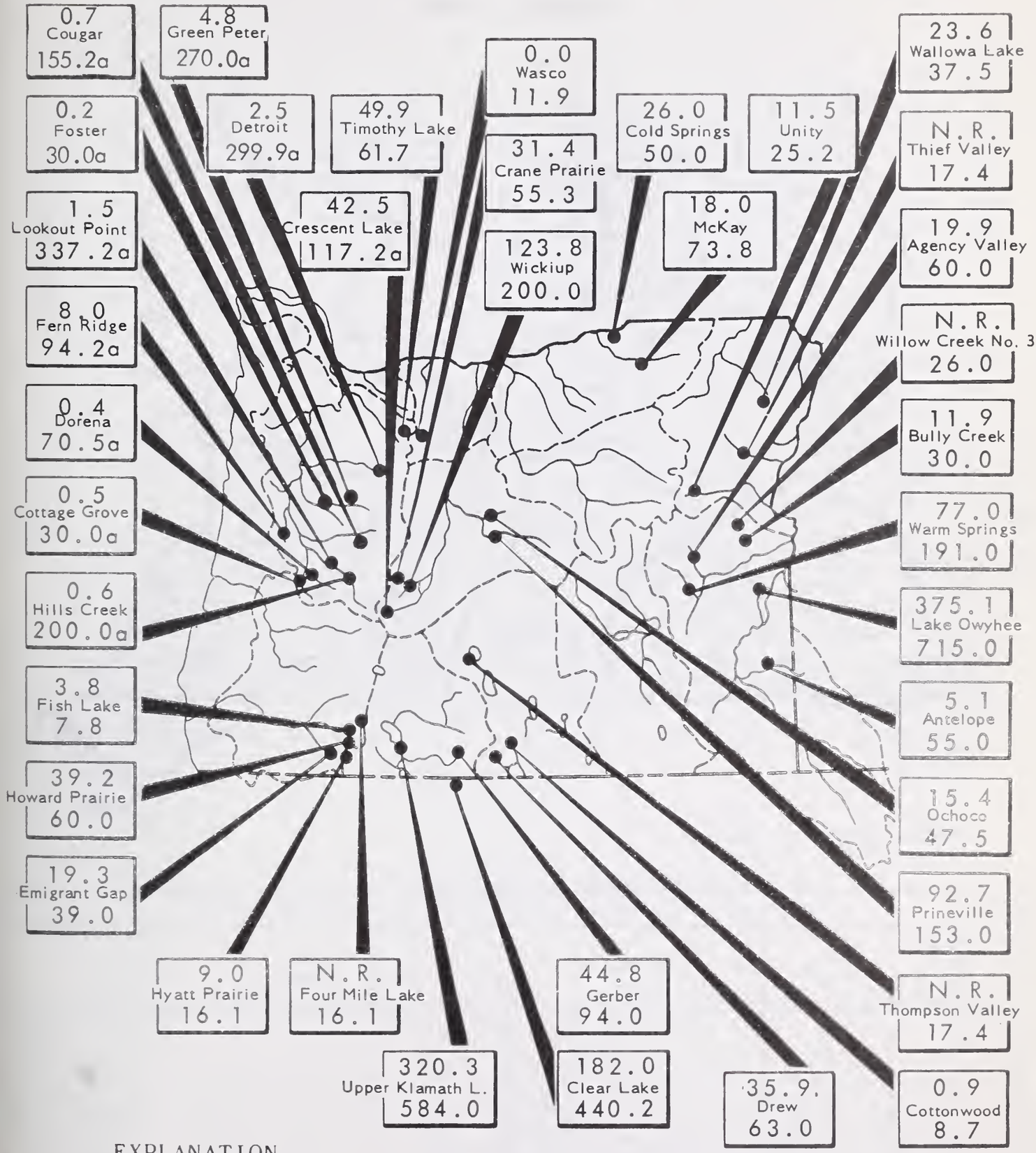
PEAVINE RIDGE
AUTOMATIC SNOW STATION

CLACKAMAS RIVER WATERSHED
AT 3500 FEET ELEVATION



STORAGE STATUS of OREGON RESERVOIRS
usable contents in thousands of acre feet

February 1, 1968



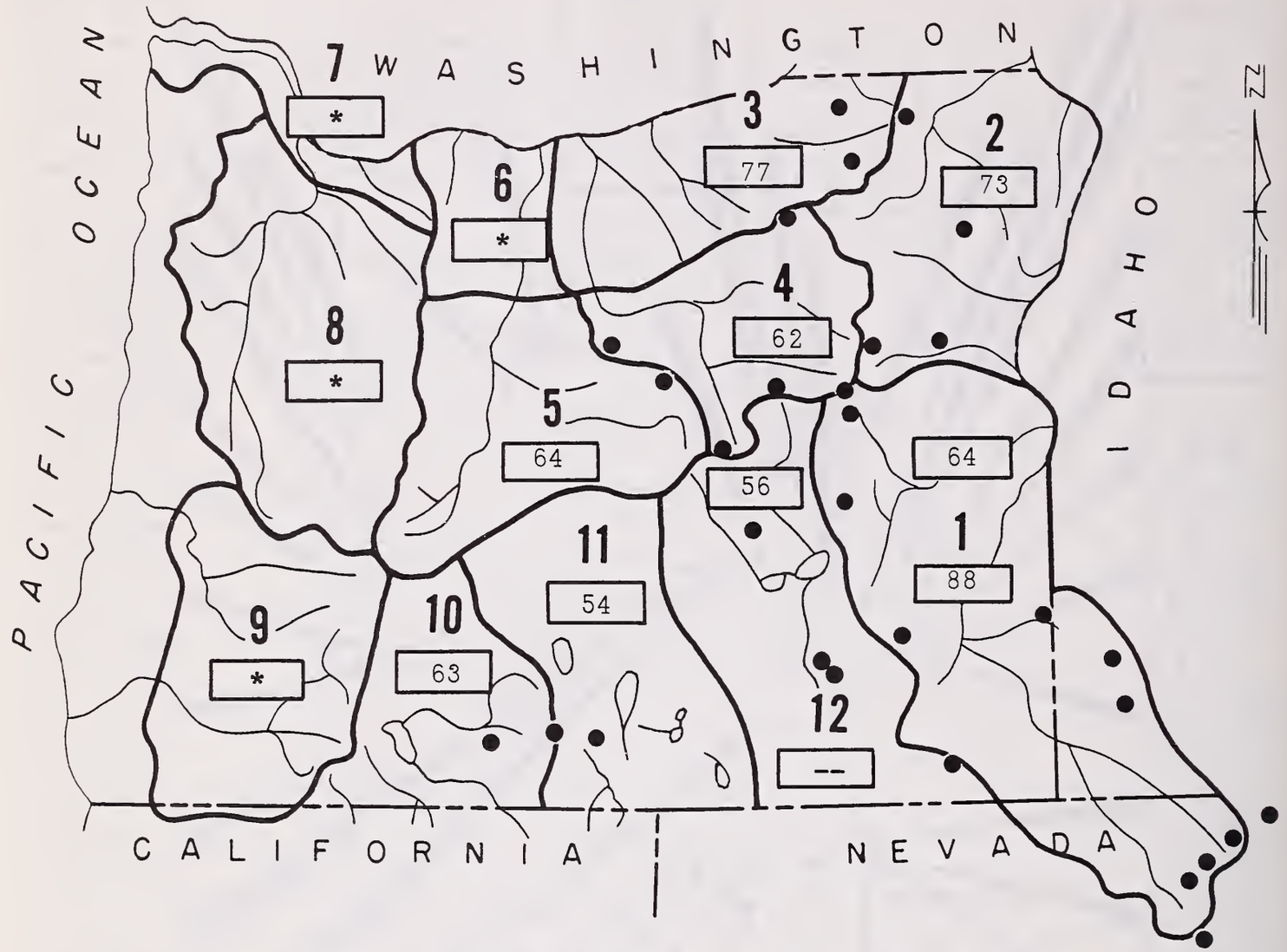
EXPLANATION

687.0 Lake Owyhee 715.0 ---Contents ---Capacity

(a) Multiple purpose reservoir - space reserved for flood runoff.
N. R. - No report.

MOUNTAIN SOIL MOISTURE in OREGON
as percent of capacity

February 1, 1968

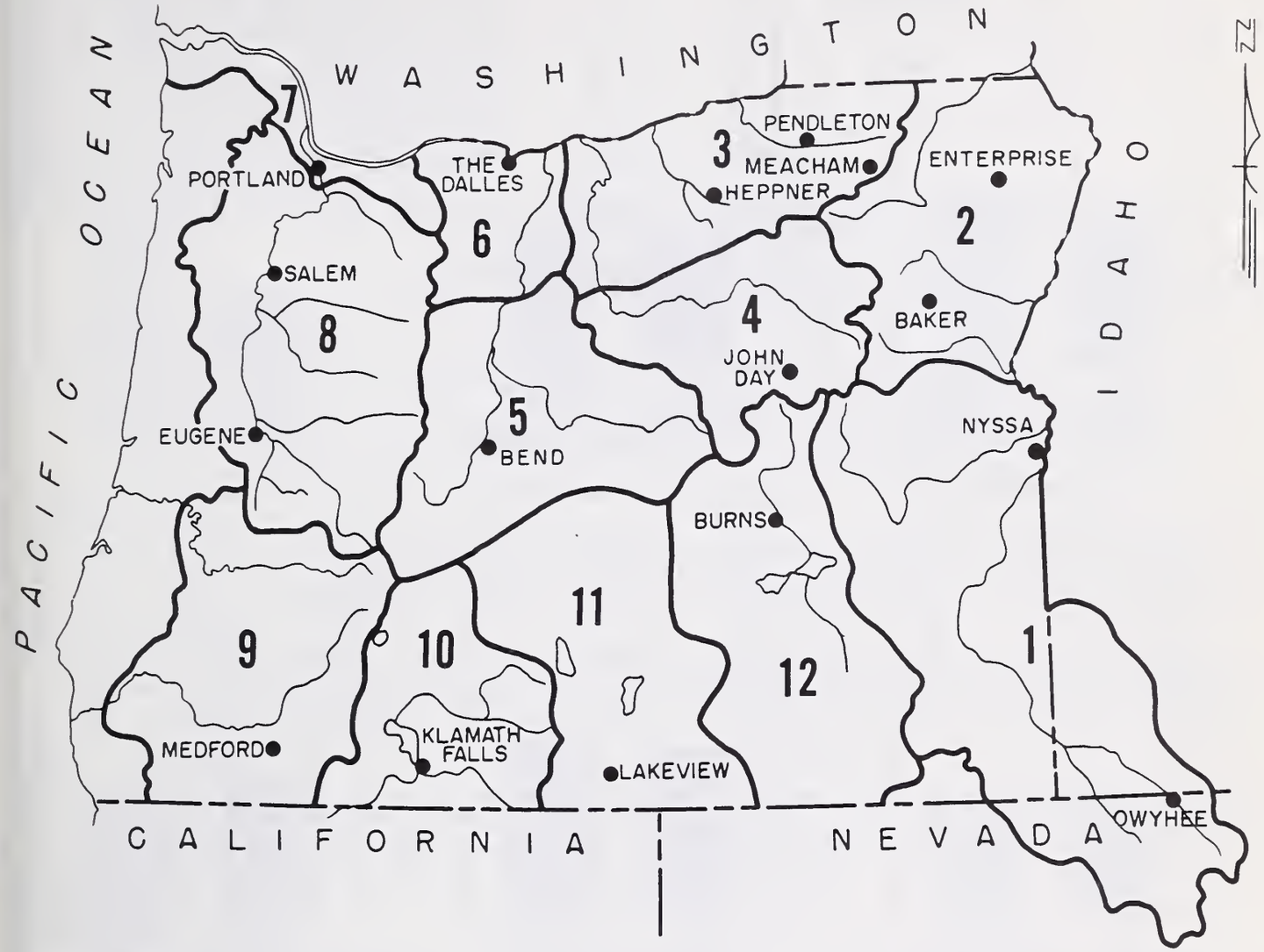


● Soil Moisture Station

**Moisture studies not yet developed in these areas.*

VALLEY PRECIPITATION in OREGON [a]

February 1, 1968

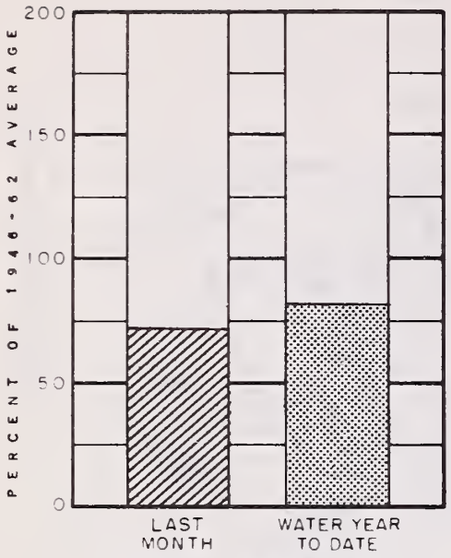


PRECIPITATION as PERCENT of the 1948-62 AVERAGE					
STATION	LAST MONTH	WATER YEAR TO DATE [b]	STATION	LAST MONTH	WATER YEAR TO DATE [b]
Baker Apt.	59	90	Lakeview	92	82
Bend	49	48	Meacham	70	95
Burns	63	80	Medford Apt.	54	76
Enterprise	55	94	Nyssa	52	59
Eugene Apt.	101	84	Pendleton Apt.	38	40
Heppner	98	63	Portland Apt.	75	76
John Day	59	72	Salem Apt.	88	86
Klamath Falls Apt.	45	45	The Dalles	32	51
			Owyhee (Nev.)	43	77

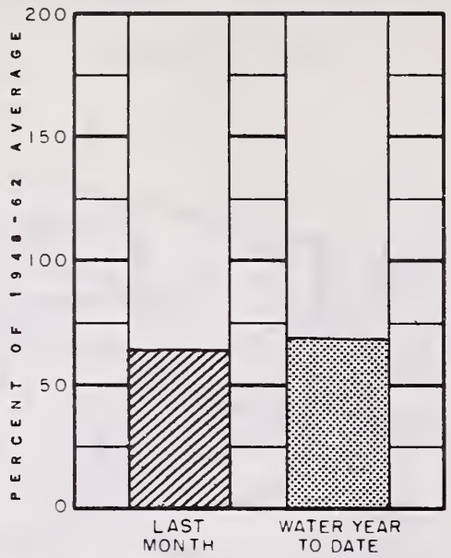
(a) Preliminary data furnished by the U.S. Weather Bureau. (b) Oct. 1 to date. (c) Report delayed.

CURRENT OREGON STREAMFLOW

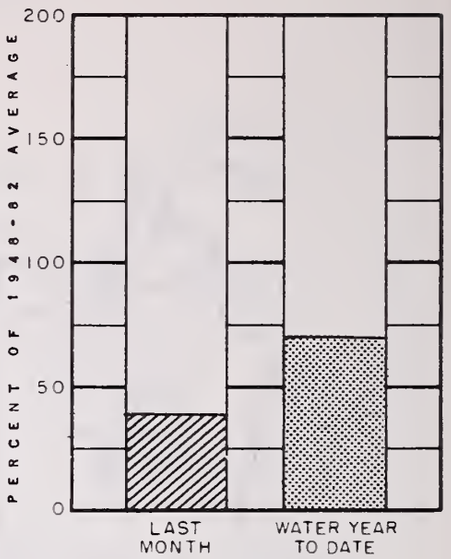
February 1, 1968



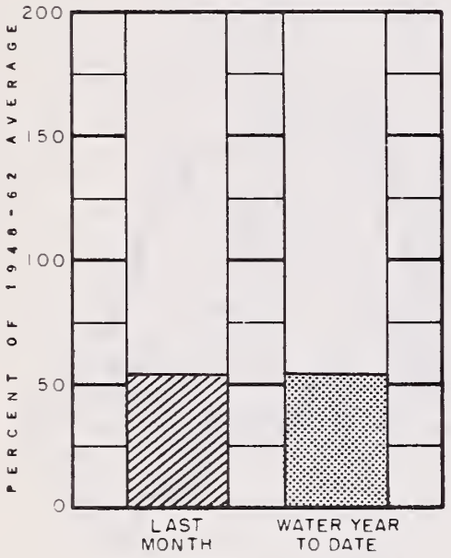
Owyhee Lake net inflow



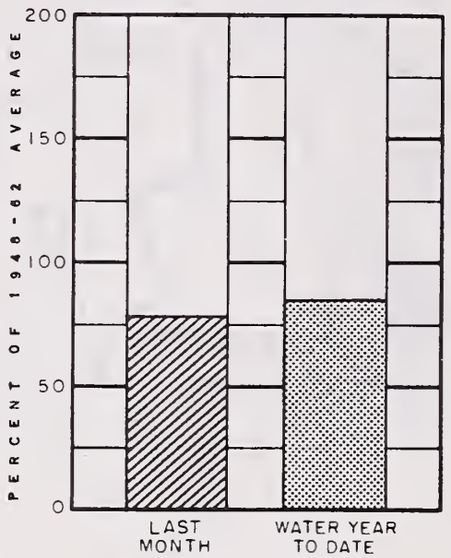
Grande Ronde at La Grande



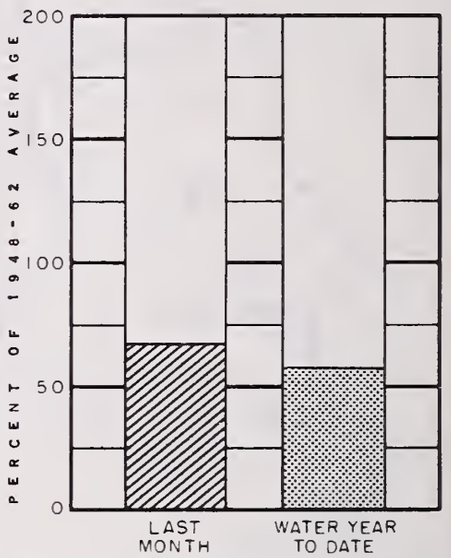
Umatilla at Pendleton



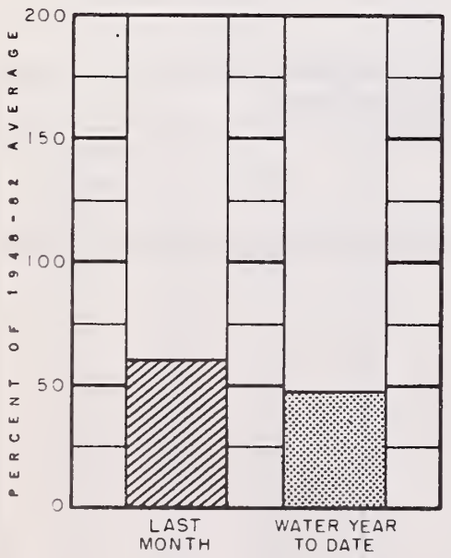
John Day at Service Creek



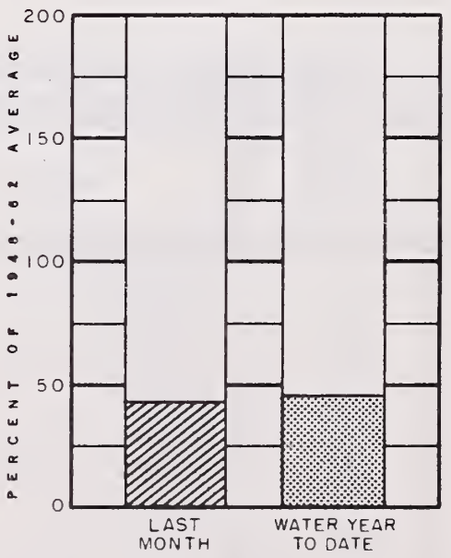
Deschutes at Moody



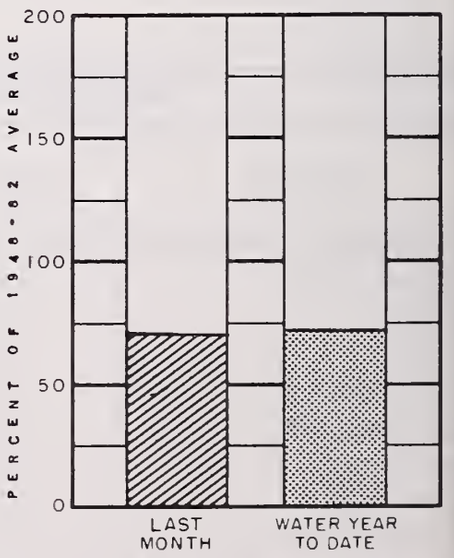
Mid. Fk. Willamette below No. Fk.



Umpqua near Elkton



Rogue at Raygold



Upper Klamath Lake net inflow

Data furnished by U.S. Geological Survey; The Pacific Power and Light Co.; and North and South Boards of Control Owyhee Project.

WATER SUPPLY OUTLOOK
OWYHEE, MALHEUR WATERSHEDS
OREGON

as of

FEBRUARY 1, 1968

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Flow of Malheur County streams in the spring and summer of 1968 will be far below the average. Water supplies for irrigators served from major reservoirs will definitely be limited to the usual amounts and water users without reservoirs will experience severe shortages unless February and March storms produce at least double the usual amounts of snow on the upper watersheds.

SNOW COVER

Water content of the mountain snowpack is about 30 percent of the 1948-62 average on the Owyhee and 72 percent average on the Malheur watersheds.

PRECIPITATION

Winter precipitation, up to February first, according to the U. S. Weather Bureau, has been only 62 percent of average with January falling far behind at 46 percent average.

SOIL MOISTURE

Watershed soils under the snowpack are much drier than usual. On the Owyhee soils are wet up to about 88 percent of capacity, while on the Malheur moisture is only 64 percent of capacity. These dry soils will soak up about 2 to 9 inches of snowmelt water in the spring.

RESERVOIR STORAGE

Water stored in Lake Owyhee on February first was about 375,100 acre feet compared with 317,900 acre feet a year ago. Total storage in Warmsprings, Agency Valley and Bully Creek Reservoirs was about 108,800 acre feet on February first compared with 89,300 acre feet last year on this date. Antelope Reservoir on Jordan Creek held 5,100 acre feet on the first of the month compared with 7,600 acre feet a year ago.

STREAMFLOW

Assuming average conditions of temperature and precipitation for the balance of the year the flow of the Owyhee River is forecast at 186,000 acre feet or 48 percent of the 15-year average (1948-62) for the period April through September. This amount is about half of last year's flow for the same period but is not as low as the 101,500 acre feet measured in 1966.

Jordan Creek is forecast to flow 58,000 acre feet or 59 percent average April through September compared with 34,100 acre feet runoff in 1966.

Malheur River near Drewsey is forecast at 50,000 acre feet or 61 percent average April through September compared with 24,800 acre runoff in 1966.

Flow of the Malheur, North Fork at Beulah, is forecast at 44,000 acre feet or 68 percent average for April through September. The 1966 flow for this six-month period was 32,900 acre feet.

Report prepared by
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1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Boulder Creek	Fair	Poor
Bully Creek	Fair	Poor
Cow Creek	Fair	Poor
Jordan Creek	Fair	Poor
Jordan Valley Irrig. Dist.	Average	Fair
McDermitt Creek	Fair	Poor
Oregon Canyon Creek	Fair	Poor
Owyhee Project	Average	Average
Succor Creek	Fair	Poor
Tenmile Creek	Fair	Poor
Vale-Oregon Irrig. Dist.	Average	Average
Warmsprings Irrig. Dist.	Average	Average
Willow Creek (Reservoired)	Average	Average

RESERVOIR STORAGE (1,000 Ac. Ft.) Feb. 1, 1968

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Agency Valley	60.0	19.9	20.4	21.8
Antelope	55.0	5.1	7.6	5.9
Bully Creek	30.0	11.9	7.8	- -
Owyhee	715.0	375.1	324.9	345.5
Warmsprings	191.0	77.0	64.4	52.5
Willow Creek #3	[b]		- -	- -

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of February 1, 1968

FORECAST POINT NO.	FORECAST POINT NAME	FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
1780	Jordan Creek above Lone Tree Creek	58	April-July	98	59
		58	April-Sept.	98	59
2140	Malheur near Drewsey	80	Feb.-July	122	66
		50	April-Sept.	82	61
2175	Malheur, North Fork at Beulah	59	Feb.-July	79	75
		44	April-Sept.	65	68
1825	Owyhee Reservoir net Inflow	200	Feb.-July	534	37
		186	April-Sept.	383	48

SOIL MOISTURE

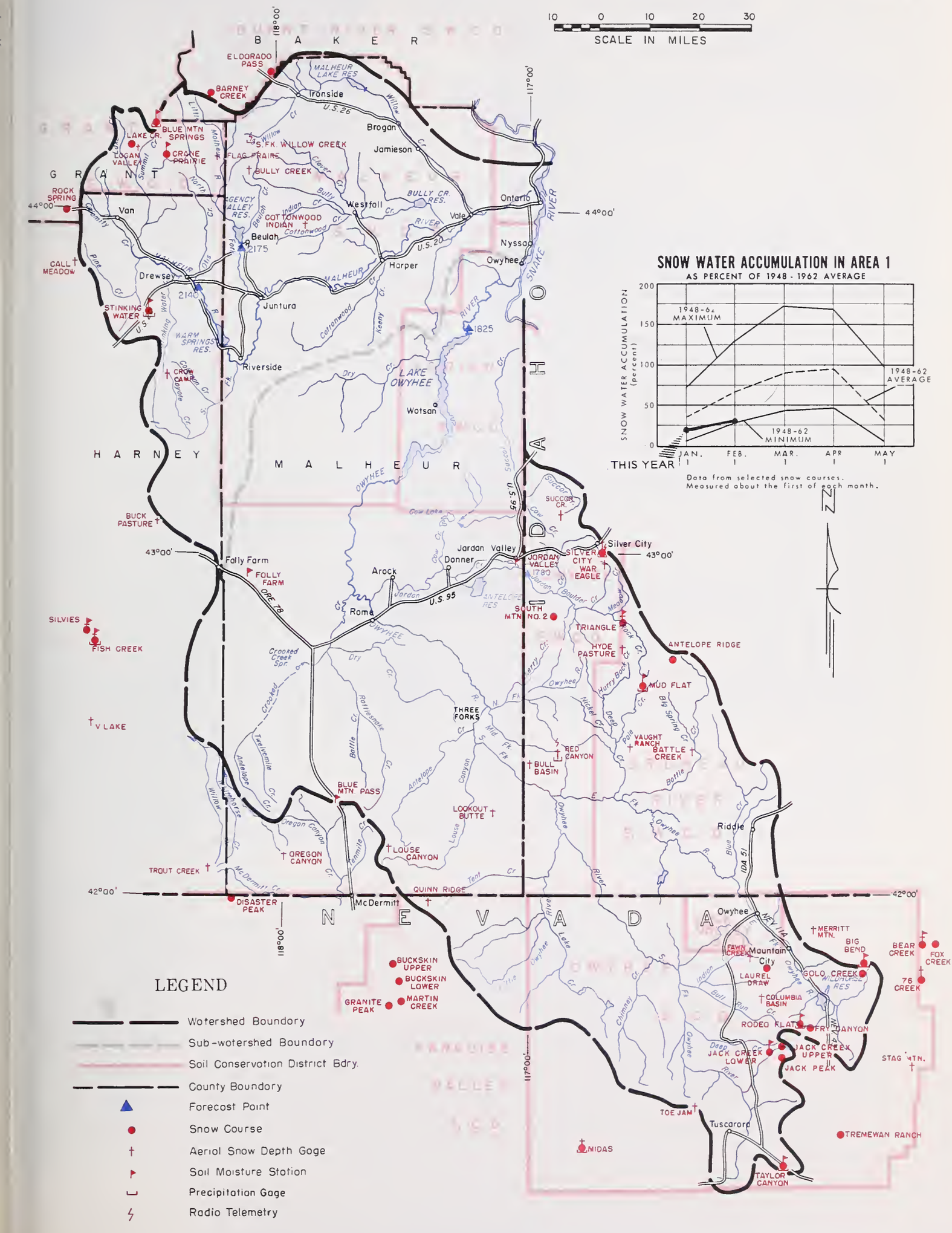
STATION NAME	STATION ELEVATION	PROFILE (Inches) DEPTH	PROFILE (Inches) CAPACITY	SOIL MOISTURE (Inches) DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Bear Creek (Nev.)	7800	72	16.8	[c]			
Big Bend (Nev.)	6700	48	16.7	1/30	15.0	15.3	14.9
Blue Mtn. Springs	5900	42	16.9	1/30	7.7	9.7	6.8
Crane Prairie	5375	48	18.2	[b]		16.1	14.8
Folly Farm	4450	30	12.5	[c]			
Jack Cr., Lower (Nev.)	6800	48	8.6	[c]			
Jordan Valley	4390	48	19.3	12/28	14.6[f]	14.7	- -
Mud Flat (Ida.)	5500	48	12.8	1/29	11.4	12.2	10.7
Rodeo Flat (Nev.)	6800	42	11.0	1/30	10.4	10.5	10.6
Stinking Water Summit	4800	48	21.9	[c]		- -	- -
Taylor Canyon (Nev.)	6200	48	15.1	1/31	14.5	12.1	12.3
Triangle (Ida.)	5150	48	16.6	[c]		- -	- -

SNOW

SNOW COURSE NAME	SNOW COURSE ELEVATION	CURRENT INFORMATION DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	PAST RECORD WATER CONTENT (Inches) LAST YEAR	1948-62 AVERAGE
Antelope Ridge (Ida.)	5900	1/29	12	3.6	5.9	- -
Barney Creek	5950	1/30	25	6.7	7.1	- -
Battle Creek (Ida.)	5700	2/4	3	0.6	3.6	- -
Bear Creek (Nev.)	7800	2/2	36	10.0	15.6	11.7[h]
Big Bend (Nev.)	6700	1/30	11	2.2	5.3	6.4[h]
Blue Mountain Springs	5900	1/30	32	7.4	10.8	10.8
Buck Pasture	5700	2/4	T	T	2.7	- -
Buckskin, Lower (Nev.)	6700	[c]				
Buckskin, Upper (Nev.)	7200	[c]				
Bull Basin (Ida.)	5600	2/4	T	T	0.6	- -
Bully Creek	5300	2/4	8	1.6	2.4	3.0[m]
Call Meadow	5340	2/4	4	0.8	3.0	- -

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (l) Ground measurement. (m) Average for 5 or more years in base period.

OWYHEE, MALHEUR WATERSHEDS



OR-1c

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
					WATER CONTENT (Inches)	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	LAST YEAR	1948-62 AVERAGE
Columbia Basin (Nev.)	6650	1/25	4	0.9	6.7	- -
Cottonwood-Indian	4320	b				
Crane Prairie	5375	c				
Crow Camp	5500	2/4	0	0.0	1.2	- -
Disaster Peak (Nev.)	6500	c				
Eldorado Pass	4600	1/31	19	2.7	4.0	2.6 h
Fawn Creek (Nev.)	7000	1/25	4	0.9	4.5	- -
Fish Creek	7900	2/4	15	3.0	17.1	- -
Flag Prairie	4750	2/4	13	2.6	3.6	- -
Fox Creek (Nev.)	6800	c				
Fry Canyon (Nev.)	6700	1/30	9	2.1	6.0	6.0
Gold Creek (Nev.)	6600	1/30	T	T	3.6	4.7
Granite Peak (Nev.)	7800	2/1	29	6.6	15.3	7.5
Hyde Pasture (Ida.)	5800	2/4	8	1.6	5.4	
Jack Creek, Lower (Nev.)	6800	c				
Jack Creek, Upper (Nev.)	7250	1/25	5	1.1	4.9	6.8 h
Jack Peak (Nev.)	8420	c				
Lake Creek R. S.	5120	1/29	24	4.4	7.0	5.8
Laurel Draw (Nev.)	6700	b				
Logan Valley	5100	2/4	13	2.6	5.4	4.8
Lookout Butte	5650	2/4	T	T	0.0	- -
Louse Canyon	6440	2/4	6	1.2	7.2	- -
Martin Creek (Nev.)	6700	2/1	28	5.8	12.2	5.8 h
Merritt Mountain (Nev.)	7000	1/25	1	0.2	5.3	- -
Midas (Nev.)	7200	1/25	2	0.4	3.0	- -
Mud Flat (Ida.)	5500	1/29	13	2.4	4.6	- -
Oregon Canyon	6950	2/4	6	1.2	8.4	- -
Quinn Ridge (Nev.)	6300	2/4	6	1.2	3.0	- -
Red Canyon (Ida.)	6500	2/4	6	1.2	5.7	- -
Rock Spring	5100	1/31	14	3.8	4.0	4.2
Rodeo Flat (Nev.)	6800	1/30	6	1.4	4.5	5.6 h
76 Creek (Nev.)	7100	1/25	11	3.1	6.7	7.4 h
Silver City (Ida.)	6400	1/31	25	6.3	11.8	9.7 h
Silvies	6900	2/4	8	1.6	9.6	- -
South Mountain #2 (Ida.)	6340	1/30	17	4.2	9.6	7.4
Stag Mountain (Nev.)	7800	1/25	6	1.1	4.1	- -
Stinking Water	4800	1/30	11	1.9	2.0	3.3 h
Succor Creek (Ida.)	6100	2/4	7	1.4	6.6	- -
Taylor Canyon (Nev.)	6200	1/31	16	3.5	6.0	3.9 h
Toe Jam (Nev.)	7700	1/25	37	8.1	7.5	- -
Tremewan Ranch (Nev.)	5700	1/30	T	T	2.4	1.7 h
Triangle (Ida.)	5150	2/4	T	T	T	- -
Trout Creek	7800	2/4	6	1.2	9.6	- -
"V" Lake	6600	2/4	1	0.2	6.6	- -
Vaught Ranch (Ida.)	5950	2/4	6	1.2	3.6	- -
War Eagle (Ida.)	7700	2/4	42	8.4	20.1	- -

Area 2

WATER SUPPLY OUTLOOK
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS
OREGON

as of

FEBRUARY 1, 1968

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Flow of streams in Baker, Union and Wallowa Counties in the spring and summer of 1968 will be 25 to 40 percent below average, except in Wallowa, where flows will be nearer 100 percent of the average. Water supplies for irrigators will be adequate in Wallowa County, but will definitely be limited to lesser amounts in other areas.

SNOW COVER

Water content of the mountain snowpack averages 77 percent in this Northeastern Oregon area with lesser amounts on the main Grande Ronde watershed and greater amounts in the Wallowa Mountains.

PRECIPITATION

Winter precipitation, up to February first according to the U. S. Weather Bureau, has been 74 percent average with January only 67 percent.

SOIL MOISTURE

Watershed soils under the snowpack are wet to 73 percent of capacity and are still somewhat drier than last year at 78 percent, but are better than 1966 with 66 percent.

RESERVOIR STORAGE

Stored water in Unity Reservoir was 11,500 acre feet compared with 9,700 a.f. last year. Wallowa Lake now holds 23,600 acre feet compared with only 9,000 acre feet a year ago. The new Mason Dam is now storing water for the first season of operation.

STREAMFLOW

Assuming average conditions of temperature and precipitation for the balance of the year the flow of Burnt River near Hereford is forecast at 30,000 acre feet or 73 percent of the 15-year average (1948-62) for the period April through September compared with 11,800 acre feet runoff in 1966.

Powder River near Baker is forecast at 56,000 acre feet or 84 percent average for April through September compared with 29,100 a.f. runoff in 1966.

Eagle Creek above Skull Creek is forecast at 140,000 acre feet or 77 percent of average compared with 117,500 acre feet runoff in 1966.

Catherine Creek near Union is forecast at 62,000 acre feet or 85 percent average compared with 30,000 acre feet runoff in 1966.

Report prepared by
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The main Grande Ronde at La Grande is forecast at 120,000 acre feet or 59 percent average for April through September compared with 69,200 acre feet runoff in 1966.

Forecasts of Wallowa County streams for April through September are as follows:

Station	Volume	Percent Average (1948-62)
East Fork Wallowa	10,500 acre ft.	88 percent
Hurricane Creek	46,000 " "	96 "
Lostine River	126,000 " "	96 "
Bear Creek	58,000 " "	80 "
Imnaha River	285,000 " "	90 "

WATER SUPPLY OUTLOOK

expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Alder Slope	Average	Average
Baker Valley	Fair	Fair
Big Creek	Average	Average
Clover Cr. (nr. N. Powder)	Fair	Poor
Cove	Average	Average
Durkee	Average	Fair
Eagle Valley	Average	Fair
Elgin	Fair	Poor
Enterprise-Joseph	Average	Average
Hereford-Bridgeport	Average	Average
Imnaha River	Average	Average
LaGrande-Island City	Fair	Poor
Lostine-Wallowa	Average	Average
No. Powder River-Wolf Cr.	Fair	Fair
Pine Valley	Average	Fair
Powder River-Elk Creek	Average	Fair
Summerville	Fair	Poor
Sumpter Valley	Average	Fair
Union-Hot Lake	Average	Average
Unity	Average	Fair

RESERVOIR STORAGE (1,000 Ac. Ft.) Feb. 1, 1968

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Thief Valley	17.4	*b*	- -	- -
Unity	25.2	11.5	9.7	6.7
Wallowa Lake	37.5	23.6	9.0	17.7

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of February 1, 1968

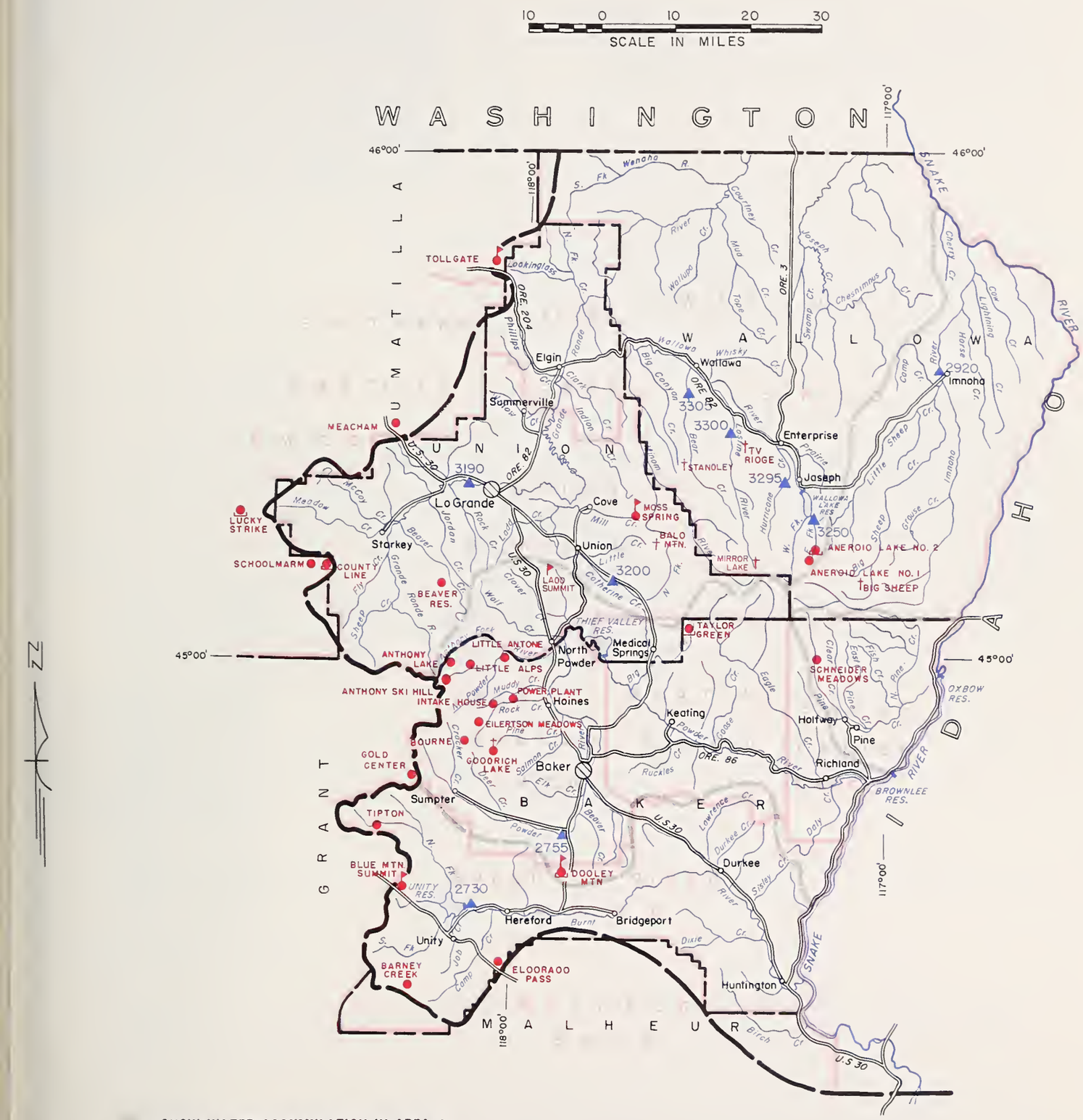
FORECAST POINT NO.	FORECAST POINT NAME	FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
3305	Bear near Wallowa	58	April-Sept.	72	80
2730	Burnt near Hereford [d]	40	Feb.-June	53	75
		30	April-Sept.	41	73
3200	Catherine near Union	62	April-Sept.	73	85
2882	Eagle Creek abv. Skull Creek	127	April-July	166	77
		140	April-Sept.	181	77
3190	Grande Ronde at La Grande	159	March-Sept.	246	65
		120	April-Sept.	203	59
3295	Hurricane near Joseph	46	April-Sept.	48	96
2920	Imnaha at Imnaha	285	April-Sept.	318	90
3300	Lostine near Lostine	126	April-Sept.	131	96
2755	Powder near Baker	54	April-July	66	82
		56	April-Sept.	67	84
3250	Wallowa, East Fork near Joseph [d]	12.0	Feb.-Sept.	13.4	90
		10.5	April-Sept.	12.0	88

SOIL MOISTURE

STATION NAME	STATION ELEVATION	PROFILE (Inches) DEPTH	PROFILE (Inches) CAPACITY	SOIL MOISTURE (Inches) DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Blue Mtn. Summit	5100	36	16.8	1/29	8.5	11.2	9.0
Dooley Mountain	5430	36	9.2	1/24	2.6	2.8	3.2
Emigrant Springs	3925	48	22.3	1/25	18.0	19.4	14.7
Ladd Summit	3730	48	18.9	1/24	10.5	10.2	9.7
Moss Springs	5850	42	25.8	11/28	14.3*f*	- -	14.2
Tollgate	5070	48	23.6	1/30	19.0	18.6	17.7

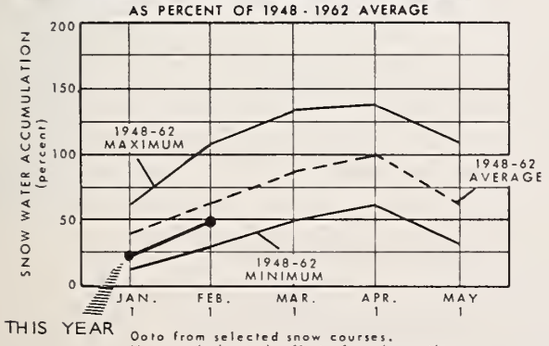
(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS



SNOW WATER ACCUMULATION IN AREA 2

AS PERCENT OF 1948 - 1962 AVERAGE



Ooto from selected snow courses.
Measured about the first of each month.

LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Boundary
- County Boundary
- Forecast Point
- Snow Course
- Soil Moisture Station
- Aerial Snow Depth Gage
- Precipitation Gage

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
					WATER CONTENT (Inches)	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	LAST YEAR	1948-62 AVERAGE
Aneroid Lake #1	7480	1/26	62	21.8	31.7	24.2
Aneroid Lake #2	7300	1/25	50	18.8	30.4	21.6
Anthony Lake	7125	1/31	43	12.7	21.7	17.3[h]
Bald Mountain[e] (Ore.)	6700	2/7	17	5.8	19.5	- -
Barney Creek	5950	1/30	25	6.7	7.1	- -
Beaver Reservoir	5340	1/26	18	7.5	7.1	7.7
Big Sheep[e]	6200	2/7	63	22.0	22.1	- -
Blue Mountain Summit	5098	1/29	18	5.2	5.8	6.1
Bourne	5800	1/26	29	8.8	10.1	11.4[h]
County Line	4800	1/31	10	2.9	3.0	4.7[h]
Dooley Mountain	5430	1/24	19	5.2	6.0	6.0
Eilertson Meadows	5400	1/25	24	8.5	9.3	8.1[h]
Eldorado Pass	4600	1/31	19	2.7	4.0	2.6[h]
Gold Center	5340	1/26	24	8.5	8.2	9.1
Goodrich Lake	6775				- -	24.7[h]
Intake House	4930	1/25	29	8.0	8.2	- -
Little Alps	6200	1/31	31	7.5	10.4	- -
Little Antone	5000	1/31	27	4.6	5.7	- -
Lucky Strike	5050	1/31	22	6.4	7.6	8.7[h]
Meacham	4300	1/25	11	2.8	6.8	6.8
Mirror Lake[e]	8200	2/7	143	50.0	55.1	- -
Moss Springs	5850	2/7	33	11.2	17.8	16.5
Power Plant	3990	1/25	18	3.8	5.0	- -
Schneider Meadows	5400	1/30	58	17.2	24.6	20.8
Schoolmarm	4775	1/31	7	2.2	2.9	4.1[h]
Standley	7400	2/7	59	20.1	24.8	- -
Taylor Green	5740	2/7	29	8.6	12.8	- -
Tipton	5100	1/31	24	6.0	6.7	7.6[h]
Tollgate	5070	1/30	21	7.5	17.1	18.3
TV Ridge[e]	7000	2/7	27	9.2	15.8	- -

Area 3

WATER SUPPLY OUTLOOK
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS
OREGON

as of

FEBRUARY 1, 1968

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Streamflow is forecast much below the usual amount for the spring and summer of 1968 in Umatilla, Morrow and Gilliam Counties. Reservoired water supplies are unusually low for this date, snowpacks are far below their usual water content, and soils in the higher watersheds are drier than last year.

SNOW COVER

Water content of the mountain snowpack is only 45 percent of the 15-year average (1948-62) for February first and only 52 percent of the amount for this date last year. Remaining winter storms will need to produce more than double the usual snow to provide adequate water supplies in 1968.

PRECIPITATION

Winter precipitation, November 1 to February 1, has been only 68 percent of the 15-year average (1948-62) according to the U. S. Weather Bureau.

SOIL MOISTURE

Watershed soils under the snowpack are wet to 77 percent of capacity but still dry enough that they will soak up from 2 to 7 inches of snowmelt water in the spring.

RESERVOIR STORAGE

Stored water in Cold Springs Reservoir is up to the 26,000 acre feet level compared with 35,600 acre feet at this date last year. This is the same amount of water held in 1966 when total storage climbed to 49,200 acre feet by April first.

McKay Reservoir now holds only 18,000 acre feet compared with 25,500 acre feet on hand at this time last year. This is the lowest storage amount since 1964 when only 10,300 acre feet were on hand. There is reason to expect a peak total of less than 60,000 acre feet in this reservoir, since the Feb.-July flow of McKay Creek is forecast at 70 percent of average or 43,000 acre feet, assuming normal winter conditions from this date.

STREAMFLOW

Report prepared by
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Forecasts of expected streamflow for the 1968 April through September period are as follows:

Station	Volume Forecast	Percent of 1948-62 Average
North Fork Walla Walla	11,900 acre ft.	61
South Fork Walla Walla	59,000 " "	78
Umatilla at Pendleton	190,000 " "	77
McKay Creek	23,000 " "	72
Butter Creek	*8,400 " "	58

*This forecast is for the March through July period.

These forecasts assume near average conditions of temperature and precipitation for the balance of the winter-spring season.

WATER SUPPLY OUTLOOK

expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Walla Walla River, No. Fk.	Average	Fair
Walla Walla River, So. Fk.	Average	Fair
Walla Walla River, Main	Average	Fair
Walla Walla River, Little	Average	Fair
Couse Creek	Fair	Poor
Dry Creek	Fair	Poor
Pine Creek	Fair	Poor
Umatilla River, Main	Average	Fair
Wildhorse Creek	Fair	Poor
Umatilla R. (Cold Springs Reservoir)	Average	Average
Umatilla River (McKay Res.)	Average	Fair
McKay Creek	Fair	Poor
Birch Creek	Fair	Poor
Butter Creek	Fair	Poor
Willow Creek	Fair	Poor
Rhea Creek	Fair	Poor
Rock Creek (John Day tributary)	Fair	Poor

RESERVOIR STORAGE (1,000 Ac. Ft.) Feb. 1, 1968

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Cold Springs	50.0	26.0	35.6	29.6
McKay	73.8	18.0	25.5	29.1

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of February 1, 1968

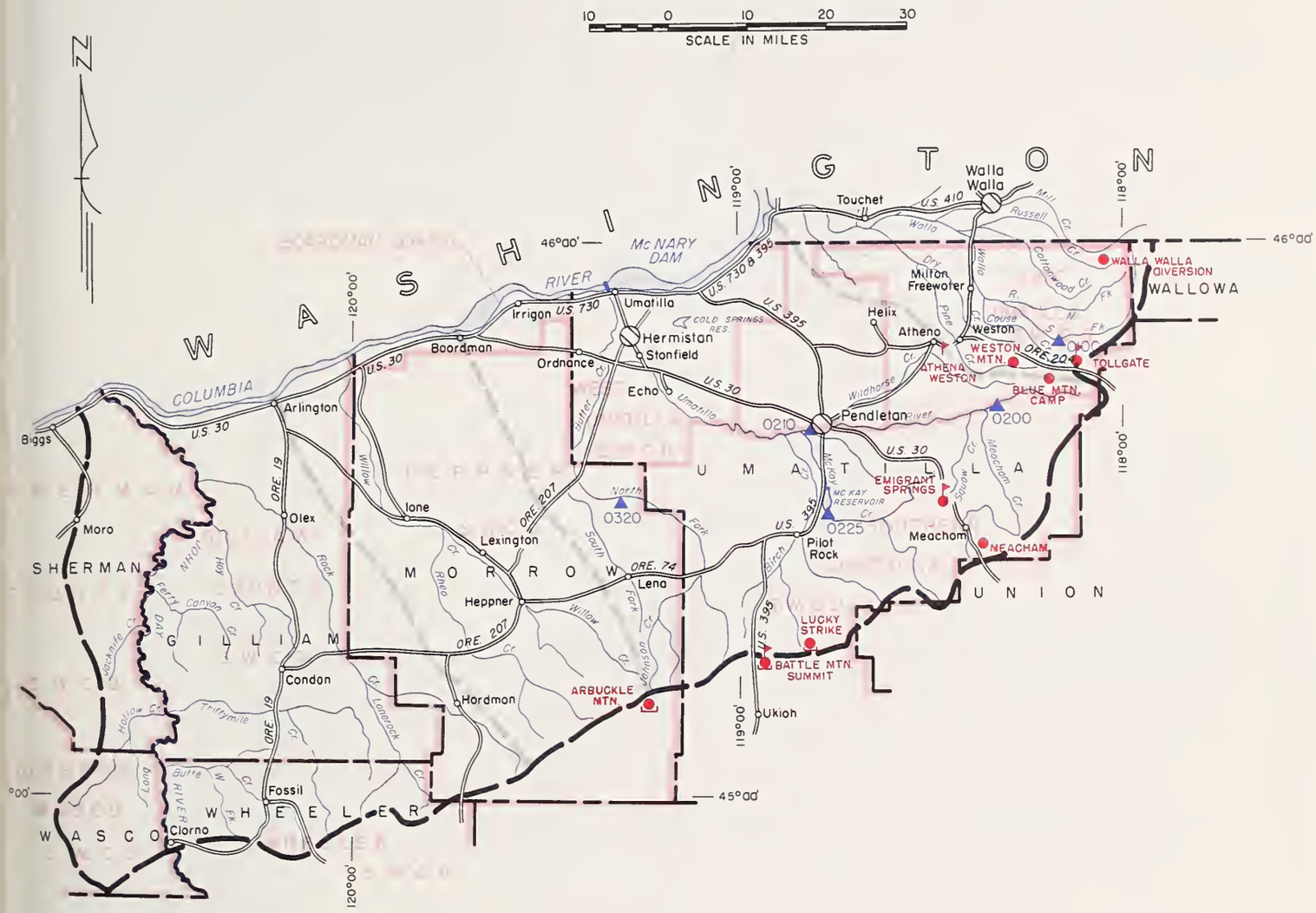
FORECAST POINT NO.	FORECAST POINT NAME	FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[l]
0320	Butter Creek near Pine City	8.4	March-July	14.5	58
0225	McKay near Pilot Rock	43	Feb.-July	62	70
		23	April-Sept.	32	72
0200	Umatilla near Gibbon	87	March-Sept.	116	75
		66	April-Sept.	93	71
0210	Umatilla at Pendleton	190	March-Sept.	247	77
0110	Walla Walla, North Fork near Milton	16.7	March-Sept.	25	67
		11.9	April-Sept.	19.6	61
0100	Walla Walla, South Fork near Milton	73	March-Sept.	89	82
		59	April-Sept.	76	78

SOIL MOISTURE

STATION NAME	STATION ELEVATION	PROFILE (Inches) DEPTH	PROFILE (Inches) CAPACITY	SOIL MOISTURE (Inches) DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Athena-Weston	1700	48	18.7	1/30	11.3	11.2	13.7
Battle Mtn. Summit	4340	48	13.8	1/25	12.4	13.8	11.7
Emigrant Springs	3925	48	22.3	1/25	18.0	19.4	14.7
Tollgate	5070	48	23.6	1/30	19.0	18.6	17.7

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS

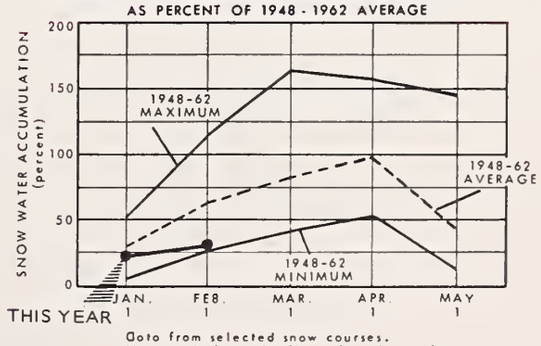


LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- Forecast Point
- Snow Course
- Soil Moisture Station
- Precipitation Gage

SNOW WATER ACCUMULATION IN AREA 3

AS PERCENT OF 1948 - 1962 AVERAGE



Data from selected snow courses.
Measured about the first of each month.

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
					WATER CONTENT (Inches)	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	LAST YEAR	1948-62 AVERAGE
Arbuckle Mountain	5400	1/30	11	3.6	6.1	8.3
Battle Mountain Summit	4340	1/25	4	0.8	2.0	2.2 m
Blue Mtn. Camp	4300	1/30	13	5.2	11.6	- -
Emigrant Springs	3925	1/25	6	1.3	4.0	5.4
Lucky Strike	5050	1/31	22	6.4	7.6	8.7 h
Meacham	4300	1/25	11	2.8	6.8	6.8
Tollgate	5070	1/30	21	7.5	17.1	18.3
Walla Walla Diversion	2400	NOT MEASURED			0.0	2.0 h
Weston Mountain	2700	1/30	0	0.0	0.0	- -

"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
UPPER JOHN DAY WATERSHEDS
OREGON

as of

FEBRUARY 1, 1968

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Flow of streams in Grant and Wheeler Counties for the spring-summer period of 1968 will be from 20 to 30 percent below the average and water supplies will be only fair. Mountain snowpacks are much below the usual accumulation and soil moisture is much less than last year.

SNOW COVER

Water content of the mountain snowpack is only 58 percent of the average for February first and is only 62 percent of the amount available on this date last year. Remaining winter storms will need to produce about double the usual snow to provide adequate water supplies in 1968.

PRECIPITATION

Winter precipitation, November to February 1, has been only 66 percent of the 15-year average (1948-62) according to the U. S. Weather Bureau.

SOIL MOISTURE

Watershed soils under the snowpack are wet up to 62 percent of capacity compared with 80 percent last year. Soils are so dry they will soak up from 2 to 9 inches of snowmelt water at different places next spring.

STREAMFLOW

Assuming average conditions of temperature and precipitation for the balance of the winter-spring period the following forecasts of streamflow are made for the April through September period:

Flow of John Day at Prairie City is forecast at 36,000 acre feet or 70 per cent of the 15-year average (1948-62).

Flow of the Middle Fork of the John Day is forecast at 105,000 acre feet or 80 percent of the average.

Strawberry Creek, near Prairie City, is forecast to flow 7,500 acre feet or 85 percent of the average.

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STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of February 1, 1968

FORECAST POINT NO.	FORECAST POINT NAME	FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
0385	John Day at Prairie City	40	March-July	56	71
		36	April-Sept.	51	70
0440	John Day, Middle Fork at Ritter	115	March-July	153	75
		105	April-Sept.	131	80
0375	Strawberry near Prairie City	6.9	March-July	8.2	84
		7.5	April-Sept.	8.8	85

WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Beech Creek	Fair	Poor
Beech Creek-Fox-Long Cr.	Fair	Poor
Bridge-Mountain Creeks	Poor	Poor
Camas Creek	Fair	Poor
Cherry Creek	Poor	Poor
Indian-Pine Creeks	Fair	Fair
John Day River, Main Fork	Fair	Fair
John Day River, Mid. Fork	Average	Fair
John Day River, N. Fork	Fair	Fair
John Day River, S. Fork	Fair	Fair
Monument-Kimberly	Average	Fair
Strawberry Creek	Average	Fair

RESERVOIR STORAGE (1,000 Ac. Ft.) Feb. 1, 1968

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE

SOIL MOISTURE

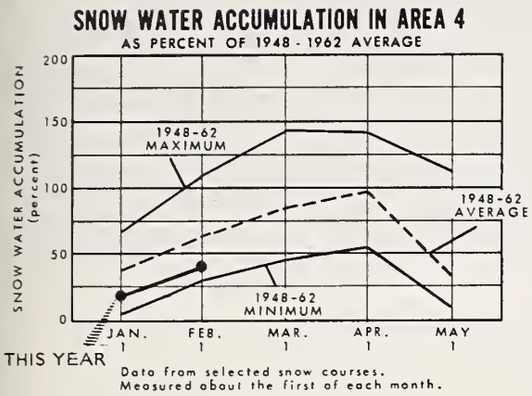
STATION NAME	STATION ELEVATION	PROFILE (Inches) DEPTH	PROFILE (Inches) CAPACITY	SOIL MOISTURE (Inches) DATE	SOIL MOISTURE (Inches) THIS YEAR	SOIL MOISTURE (Inches) LAST YEAR	SOIL MOISTURE (Inches) 2 YEARS AGO
Battle Mtn. Summit	4340	48	13.8	1/25	12.4	13.8	11.7
Beech Creek	4800	48	21.3	1/30	9.6	14.1	11.6
Blue Mountain Springs	5900	42	16.9	1/30	7.7	9.7	6.8
Blue Mountain Summit	5100	36	16.8	1/29	8.5	11.2	9.0
Derr	5670	24	9.0	1/30	8.5	7.9	6.8
Marks Creek	4540	36	14.1	1/29	9.0	12.1	11.3
Snow Mountain	6300	48	16.7	*b*		14.3	12.0
Starr Ridge	5150	36	10.6	1/29	7.8	10.4	6.4
Williams Ranch	4500	42	17.9	*b*		17.6	15.8

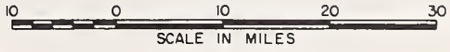
SNOW

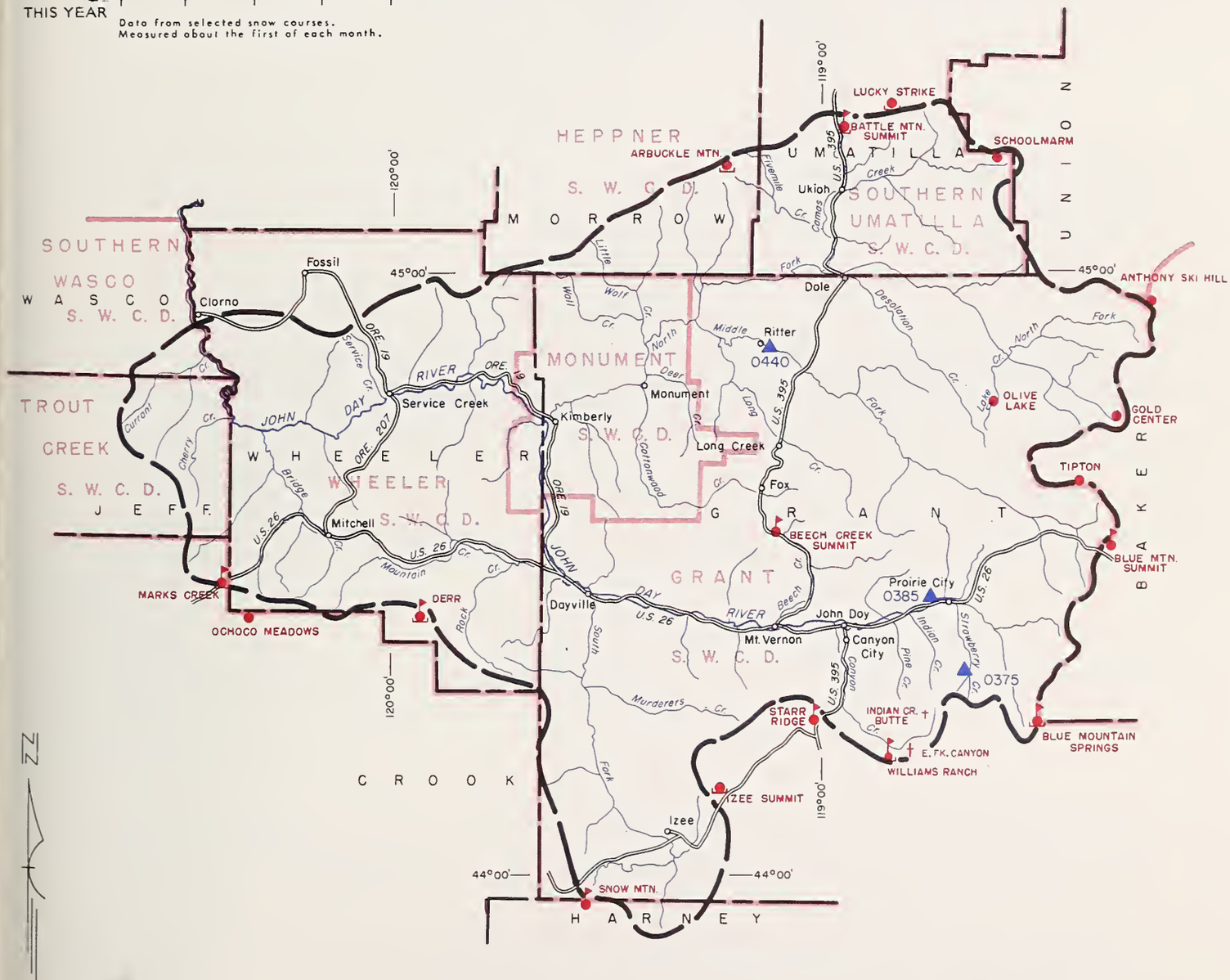
SNOW COURSE NAME	SNOW COURSE ELEVATION	CURRENT INFORMATION DATE OF SURVEY	CURRENT INFORMATION SNOW DEPTH (Inches)	CURRENT INFORMATION WATER CONTENT (Inches)	PAST RECORD WATER CONTENT (Inches) LAST YEAR	PAST RECORD WATER CONTENT (Inches) 1948-62 AVERAGE
Anthony Lake	7125	1/31	43	12.7	21.7	17.3[h]
Arbuckle Mountain	5400	1/30	11	3.6	6.1	8.3
Battle Mountain Summit	4340	1/25	4	0.8	2.0	2.2[m]
Beech Creek Summit	4800	1/30	7	1.7	3.4	4.3[h]
Blue Mountain Springs	5900	1/30	32	7.4	10.8	10.8
Blue Mountain Summit	5098	1/29	18	5.2	5.8	6.1
Derr	5670	1/30	13	2.8	7.6	6.9
East Fork Canyon	5700	*c*			4.9	- -
Gold Center	5340	1/26	24	8.5	8.2	9.1
Indian Creek Butte	6550	*c*			16.2	- -
Izee Summit	5293	1/29	13	2.9	6.5	6.2[h]
Lucky Strike	5050	1/31	22	6.4	7.6	8.7[h]
Marks Creek	4540	1/29	5	0.8	5.1	3.6
Ochoco Meadows	5200	1/30	15	3.0	8.1	7.8
Olive Lake	6000	DISCONTINUED				
Schoolmarm	4775	1/30	7	2.2	2.9	4.1[h]
Snow Mountain	6300	NOT MEASURED			10.9	- -
Starr Ridge	5150	1/29	9	2.0	3.6	4.6[h]
Tipton	5100	1/31	24	6.0	6.7	7.6[h]
Williams Ranch	4500	*c*			0.0	- -

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

UPPER JOHN DAY WATERSHEDS







LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- Forecast Point
- Snow Course
- Soil Moisture Station
- Aeriol Snow Depth Goge
- Precipitation Goge

WATER SUPPLY OUTLOOK
UPPER DESCHUTES, CROOKED WATERSHEDS
OREGON

as of

FEBRUARY 1, 1968

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Streamflow in Crook, Deschutes and Jefferson Counties in the spring-summer period of 1968 will be much below the average and water supplies for irrigation will accordingly be poor to fair in all areas except those where stored water supplies, now notably deficient, will provide a limited measure of assistance.

SNOW COVER

Water content of the mountain snowpack totals about 31 percent of the 15-year average (1948-62) on the Crooked River and 61 percent average on the Deschutes. Remaining winter storms will need to produce more than double the usual snow to provide adequate water supplies in 1968.

PRECIPITATION

Winter precipitation, November to February 1, has been only 55 percent of the 15-year average according to the U. S. Weather Bureau.

SOIL MOISTURE

Moisture in the soils under the snowpack has not recovered from its extreme drought condition of last summer and is now only 64 percent of capacity compared with 86 percent last year.

RESERVOIR STORAGE

Water stored in reservoirs is at discouragingly low levels. On Crooked River, Ochoco Reservoir contains 15,400 acre feet compared with 17,800 acre feet last year on February first. Prineville Reservoir contains 92,700 acre feet compared with 100,100 acre feet last year.

On the Deschutes River Crane Prairie Reservoir contains 31,400 acre feet compared with 38,600 acre feet in 1967. Wickiup Reservoir holds 123,800 acre feet compared with 134,600 acre feet a year ago. Crescent Lake holds 42,500 acre feet compared with 53,300 acre feet last year.

continued on next page

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STREAMFLOW

Forecasts of expected streamflow in the April through September period of 1968, assuming near average conditions of temperature and precipitation in the next four months, are as follows:

Station	Volume Forecast	Percent of 1948-62 Average
Ochoco Reservoir net Inflow	9,000 acre ft.	28 percent
Crooked River abv. Prineville	68,000 " "	54 "
Deschutes below Snow Creek	51,000 " "	68 "
Crane Prairie Reservoir Inflow	106,000 " "	74 "
Odell Creek	27,000 " "	79 "
Crescent Creek	21,000 " "	64 "
Little Deschutes - Lapine	73,000 " "	65 "
Deschutes at Benham Falls	436,000 " "	69 "
Squaw Creek	46,000 " "	82 "
Tumalo Creek	44,000 " "	81 "

WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Arnold Irrigation District	Average	Fair
Bear Creek	Fair	Poor
Beaver Creek	Fair	Poor
Camp Creek	Fair	Poor
Central Ore. Irrig. Dist.	Average	Average
Crooked River	Fair	Poor
Deschutes River	Fair	Fair
Hay-Trout Creeks	Poor	Poor
Lone Pine Irrig. Dist.	Average	Average
Mill Creek	Poor	Poor
North Unit Irrig. Dist.	Average	Fair
Ochoco Creek	Poor	Poor
Sisters Irrigation Dist.	Average	Average
Snow Creek Irrig. Dist.	Average	Average
Squaw Creek Irrig. Dist.	Average	Average
Swalley Ditch	Excellent	Excellent
Tumalo Project	Average	Average
Walker Basin Irrig. Dist.	Average	Average

RESERVOIR STORAGE (1,000 Ac. Ft.) Feb. 1, 1968

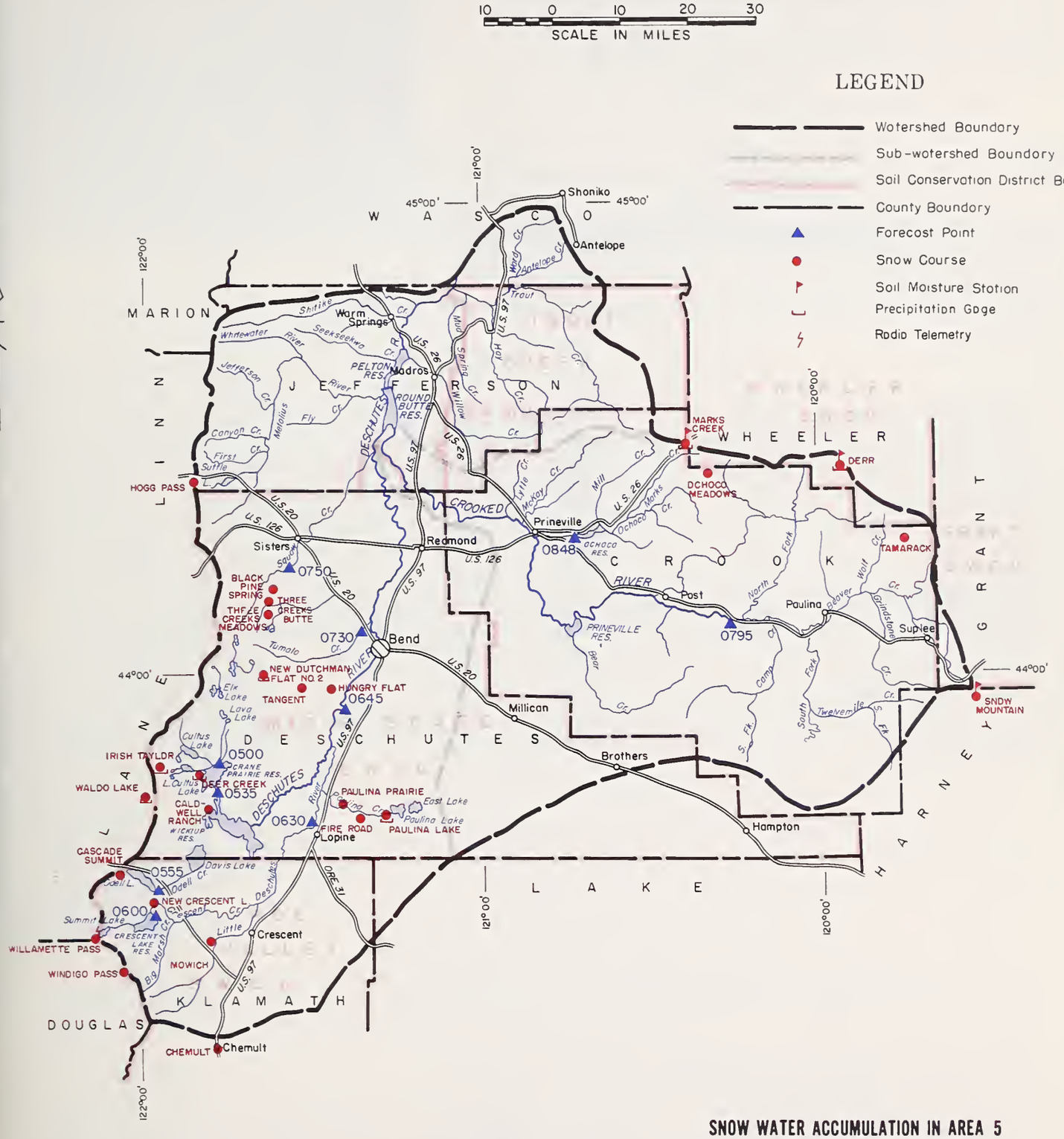
RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Crane Prairie	55.3	31.4	38.3	42.6
Crescent Lake	86.9	42.5	53.4	49.5
Ochoco	47.5	15.4	17.8	21.1
Prineville	153.0	92.7	100.1	- -
Wickiup	200.0	123.8	134.6	161.7

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of February 1, 1968

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
0535	Crane Prairie Reservoir total Inflow	106	April-Sept.	143	74
0600	Crescent at Crescent Lake [d]	18	March-July	30	60
		21	April-Sept.	33	64
0795	Crooked near Post	110	Feb.-July	201	55
		68	April-Sept.	125	54
0645	Deschutes at Benham Falls [d]	286	April-July	417	68
		436	April-Sept.	631	69
0500	Deschutes below Snow Creek	60	Feb.-Sept.	89	67
		51	April-Sept.	75	68
0630	Deschutes, Little near Lapine [d]	80	Feb.-July	130	62
		73	April-Sept.	113	65
0848	Ochoco Reservoir net Inflow	18	Feb.-June	50	36
		9	April-Sept.	32	28
0555	Odell near Crescent	27	April-Sept.	34	79
0750	Squaw near Sisters	46	April-Sept.	56	82
0730	Tumalo near Bend [d]	44	April-Sept.	54	81

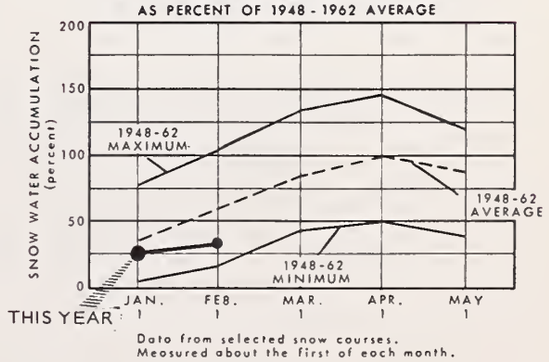
(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

UPPER DESCHUTES, CROOKED WATERSHEDS



SNOW WATER ACCUMULATION IN AREA 5

AS PERCENT OF 1948 - 1962 AVERAGE



Data from selected snow courses.
Measured about the first of each month.

Upper Deschutes, Crooked Watersheds

SOIL MOISTURE

STATION NAME	STATION ELEVATION	PROFILE (Inches) DEPTH	PROFILE (Inches) CAPACITY	SOIL MOISTURE (Inches) DATE	SOIL MOISTURE (Inches) THIS YEAR	SOIL MOISTURE (Inches) LAST YEAR	SOIL MOISTURE (Inches) 2 YEARS AGO
Derr	5670	24	9.0	1/30	8.5	7.9	6.8
Marks Creek	4540	36	14.1	1/29	9.0	12.1	11.3
Snow Mountain	6300	48	16.7	b		14.3	12.0

SNOW

SNOW COURSE NAME	ELEVATION	CURRENT INFORMATION DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	PAST RECORD WATER CONTENT (Inches) LAST YEAR	1948-62 AVERAGE
Black Pine Spring	4600	1/31	8	1.1	1.9	4.1 h
Caldwell Ranch	4400	1/30	27	6.6	9.4	9.2 h
Cascade Summit	4880	2/1	54	13.8	21.5	21.9
Chemult	4760	1/30	33	6.0	10.0	9.1
Deer Creek	4554	1/30	39	10.2	13.4	- -
Derr	5670	1/30	13	2.8	7.6	6.9
Fire Road	5050	1/29	6	1.9	5.5	5.9 h
Hogg Pass	4755	2/1	73	21.8	27.4	29.0
Hungry Flat	4400	1/30	16	3.5	5.0	5.8 h
Irish Taylor	5500	1/31	54	16.1	26.0	26.8 h
Marks Creek	4540	1/29	5	0.8	5.1	3.6
Mowich	4700	1/26	15	5.1	7.5	5.1 h
New Crescent Lake	4800	1/25	20	6.9	11.8	12.4 h
New Dutchman Flat #2	6400	1/30	60	18.5	40.2	33.5 h
Ochoco Meadows	5200	1/30	15	3.0	8.1	7.8
Paulina Lake	6330	1/29	19	4.2	14.8	15.5 h
Paulina Prairie	4285	1/29	1	0.1	2.4	1.9 h
Snow Mountain	6300	NOT MEASURED				
Tamarack	4800	1/31	12	3.2	4.4	- -
Tangent	5400	1/30	44	12.6	19.0	16.8 h
Three Creeks Butte	5200	1/31	26	6.6	7.7	8.8 h
Three Creeks Meadows	5650	1/31	34	8.6	11.8	13.9 h
Waldo Lake	5500	1/27	42	12.2	21.7	22.6 h
Willamette Pass	5600	1/26	52	16.6	26.0	28.5 h
Windigo Pass	5800	1/25	36	12.4	27.7	29.4 h

"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS
OREGON

as of

FEBRUARY 1, 1968

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Streamflow in Hood River and Wasco Counties in the spring-summer period of 1968 will be 25 to 30 percent below average and water supplies for farmers, orchardists and others will vary from poor to fair. Snowpacks are extremely shallow this year and watershed soils under the snowpack are much drier than usual.

SNOW COVER

Water content of the mountain snowpack is about 58 percent of the 15-year average (1948-62) and only half of the amount measured last year at this time.

PRECIPITATION

Winter precipitation, November 1 to February 1, has been only 64 percent of the average according to the U. S. Weather Bureau.

SOIL MOISTURE

Moisture in the watershed soils under the snowpack are exceptionally dry. Fall rains were not sufficient to recharge the watersheds after the extremely hot, dry summer of 1967.

STREAMFLOW

Forecasts of expected streamflow for the April through September period of 1968, assuming near average conditions of temperature and precipitation during the next four months, are as follows:

Station	Volume Forecast	Percent of 1948-62 Average
Hood River near Hood River	270,000 acre feet	71 percent
West Fork Hood River	130,000 " "	73 "
White River near Tygh Valley	121,000 " "	69 "

Flow of Mill Creek, the Mile Creeks and small tributaries of Hood and White Rivers will provide only fair water supplies in the spring season with poor supplies in the late season "falling off" much earlier than usual.

Adequate water supplies can be expected only if remaining winter storms should bring more than double the usual amount of snow.

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WATER SUPPLY OUTLOOK

expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Aldridge Ditch (Tony Creek)	Average	Fair
Badger Creek	Average	Fair
Dee Irrigation District	Average	Fair
East Fork Irrig. Dist.	Average	Fair
Farmers Irrigation Dist.	Average	Fair
Hood River Irrig. Dist.	Average	Fair
Juniper Flat	Fair	Fair
Middle Fork Irrig. Dist.	Average	Fair
Mile Creeks	Fair	Poor
Mill Creek	Fair	Poor
Mount Hood Irrig. Dist.	Average	Fair
Rock-Gate-Threemile Crs.	Fair	Poor
Tygh Creek	Fair	Poor
White River	Fair	Fair

RESERVOIR STORAGE (1,000 Ac. Ft.) Feb. 1, 1968

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Clear Lake	11.9	0.0	1.6	- -

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of February 1, 1968

FORECAST POINT NO.	FORECAST POINT NAME	FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
1210	Hood River near Hood River[d]	230	April-July	322	71
		270	April-Sept.	381	71
1185	Hood, West Fork near Dee	106	April-July	155	68
		130	April-Sept.	179	73
1015	White below Tygh Valley	103	April-July	158	65
		121	April-Sept.	176	69

SNOW

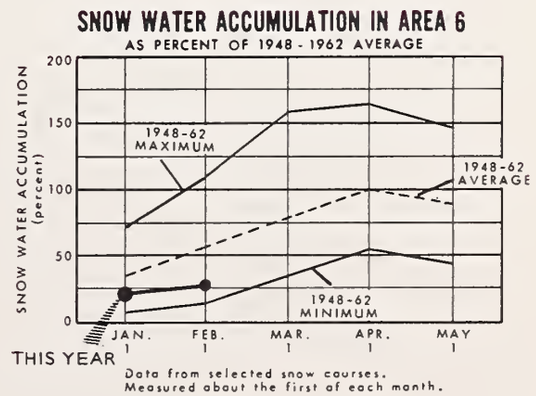
SNOW COURSE NAME	ELEVATION	CURRENT INFORMATION: DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	PAST RECORD: WATER CONTENT (Inches) LAST YEAR	1948-62 AVERAGE
Brooks Meadows	4300					
Clear Lake	3500	1/31	14	2.8	4.6	6.9[h]
Clear Lake (Experimental)	3500	1/31	30	5.9	8.5	12.1[h]
Cooper Spur	3490	2/1	24	5.3	5.5	- -
Greenpoint Reservoir	3400	1/25	22	7.3	8.4	12.0
Knebal Springs	3850	c				
Lambert Point	7000	b				
Parkdale	1770	2/1	4	0.5	0.0	- -
Phlox Point	5400	1/30	61	20.0	41.1	39.7
Red Hill	4400	1/27	41	11.9	20.3	30.2
Still Creek	3670	1/30	35	9.7	13.2	17.0
Switchback	3255	2/1	26	5.3	6.1	- -
Tilly Jane	6000	1/21	28	12.1	25.2	28.2
Ulrich Ranch Junction	3350	c.				
Umbrella Falls	5400	2/3	91	40.7	42.9	- -
Upper Valley	2530	2/1	13	2.1	0.0	- -

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS

LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- Forecast Point
- Snow Course
- Aeriol Snow Depth Goge
- Soil Moisture Station
- Precipitation Gage
- Temperature Gage
- Radio Telemetry



"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
LOWER COLUMBIA WATERSHEDS
OREGON

as of

FEBRUARY 1, 1968

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Streamflow during the snowmelt season in 1968 for the Columbia River and its tributaries is expected to be below average and much below that for 1967. The greatest flow deficiencies are expected for the smaller streams in southwestern Idaho, most of Oregon and southwestern Washington.

Storage in irrigation reservoirs is well above average on the Snake River and its tributaries in Idaho and on the Yakima in Washington. Streamflow and storage will provide an adequate water supply for these areas. Some shortages are now in prospect for irrigated areas without storage in Oregon and northern Nevada.

SNOW COVER

Snowfall to date has been near average for the upper Columbia watershed and the Okanogan in British Columbia and on the headwaters of the Clark Fork in Montana. On the other extreme, snowfall is near one-half of average for midseason over southwestern Idaho, in Oregon, and in the Cascade Range in southwestern Washington.

SOIL MOISTURE

With a continuing pattern of below average precipitation at lower elevations soil moisture is generally below average in valley areas and near average at high elevations in the upper Basin.

STREAMFLOW

The flow of the Columbia River at The Dalles, Oregon, as reported by the U. S. Geological Survey, has been slightly below average for the fall and mid-winter months. The record by months for the 1968 water year is as follows:

Month	Percent of Average Discharge (1948-62)
October	96 (Adjusted for storage)
November	99 " " "
December	88 " " "
January	96 " " "

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STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of February 1, 1968

FORECAST POINT NO.	FORECAST POINT NAME	FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
1057	Columbia at The Dalles	64,000 95,000	April-June April-Sept.	74,100 108,500	86 88

HISTORICAL DATA (Columbia River at The Dalles)

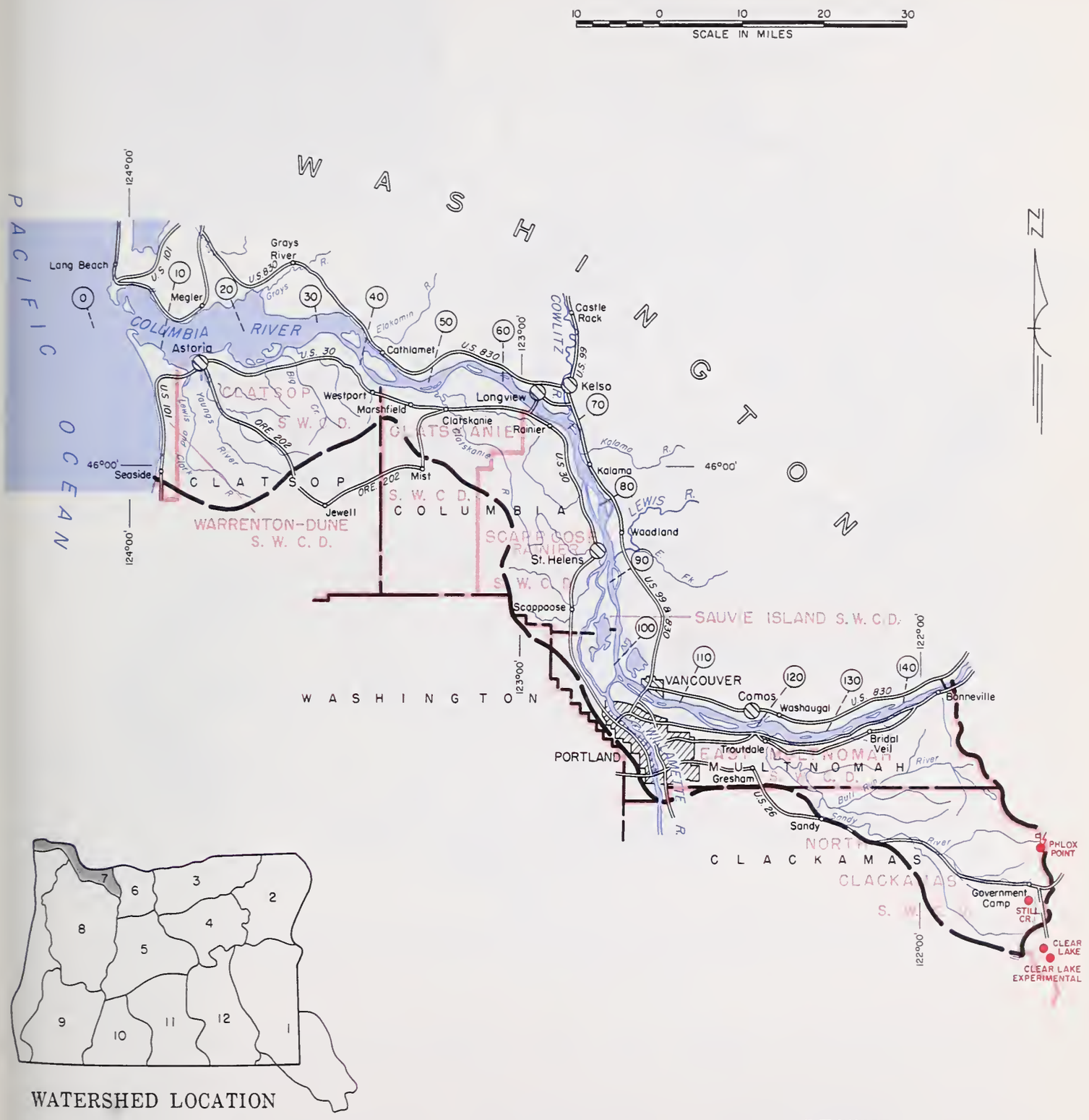
YEAR	STREAMFLOW[d] (1,000 A.F.) APR.— SEPT.	APR.— JUNE	MAY—JUNE	PEAK (1,000 c.f.s)	DATE
1943	115,000	75,300	52,400	541	June 21
1944	61,900	39,200	32,100	326	June 19
1945	81,600	54,600	47,300	505	June 8
1946	108,100	75,400	59,600	581	May 30
1947	100,300	70,000	56,800	536	May 11
1948	130,500	94,600	81,900	999	May 31
1949	95,700	71,400	56,000	622	May 18
1950	120,400	74,700	61,200	744	June 25
1951	113,000	75,600	59,100	597	May 26
1952	107,700	77,500	57,300	557	May 28
1953	100,600	64,900	55,800	609	June 17
1954	119,500	70,500	59,300	561	May 23
1955	99,500	58,300	50,300	545	June 26
1956	131,400	96,900	75,800	815	June 3
1957	105,700	80,500	67,200	700	May 22
1958	97,700	72,000	58,600	593	May 31
1959	112,500	71,900	58,900	555	June 23
1960	97,000	64,000	48,000	442	June 6
1961	101,400	74,400	64,000	699	June 8
1962	94,600	64,100	49,200	460	June 5
1948-62 Avg.	108,500	74,100	60,200	633	
1963	87,000	56,300	46,200	437	June 18
1964	109,020	70,739	61,313	662	June 18

LOWER COLUMBIA RIVER FLOOD STAGES (with 9.5' tide at Astoria)

VANCOUVER GAGE (Weather Bu.)	FLOW AT THE DALLES (1,000 c.f.s)	DRAINAGE DISTRICT PUMPHOUSE SANDY	SAUVIE ISL.	SCAPPOOSE	DEER ISL.	RAINIER	BEAVER	WOODSON
		RIVER MILES 118.9	96.0	91.0	77.0	62.0	52.0	47.0
35 (1894)	1210	41.2	34.2	33.3	28.5	21.9	17.5	15.5
34	1160	40.5	33.5	32.5	27.7	21.2	17.0	15.0
33	1100	39.6	32.4	31.4	26.7	20.2	16.1	14.3
32	1050	38.9	31.5	30.5	25.7	19.5	15.4	13.7
31 (1948)	1000	38.0	30.7	29.5	25.1	18.8	14.7	13.0
30	943	36.6	29.5	28.5	24.3	18.1	14.0	12.4
29	897	35.5	28.5	27.7	23.7	17.5	13.4	11.8
28	853	34.3	27.5	26.7	22.8	17.0	13.0	11.4
27 (1956)	811	33.0	26.5	25.6	21.8	16.2	12.5	11.0
26 (1950)	771	32.1	25.5	24.6	20.9	15.5	12.2	10.7
25	733	30.7	24.2	23.2	19.7	14.6	11.7	10.3
24	697	29.7	23.0	22.2	19.0	14.1	11.4	10.2
23	662	29.0	22.3	21.4	18.4	13.6	11.2	10.0
22	628	28.1	21.4	20.3	17.2	13.0	10.9	9.7
21	595	27.2	20.7	19.5	16.4	12.6	10.6	9.6
20 (1954)	564	26.2	19.8	18.6	15.5	12.1	10.2	9.4
19	534	25.5	19.2	18.0	15.0	11.8	10.0	9.3
18	501	24.4	18.3	17.2	14.3	11.4	9.8	9.1
17	479	23.4	17.4	16.4	13.7	11.0	9.6	8.9
16	452	22.4	16.5	15.5	13.0	10.5	9.3	8.7

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records.

LOWER COLUMBIA WATERSHEDS



WATERSHED LOCATION

LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- (50) River Miles
- Snow Course
- Temperature
- Radio Telemetry

Lower Columbia Watersheds

"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
WILLAMETTE WATERSHEDS
OREGON

as of

FEBRUARY 1, 1968

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Spring and summer water supplies for 1968 in the Willamette Valley are expected to be from 10 to 20 percent less than the usual available amounts. Mountain snowpacks hold about 35 percent less water than usual; winter precipitation has been well below the average; and mountain soils are much drier than usual for this mid-winter date.

SNOW COVER

Water content of the mountain snowpack totals about 65 percent of the 15-year (1948-62) average, with less in the north and more in the south end of the valley.

PRECIPITATION

Winter precipitation, November 1 to February 1, has been only 65 percent of the average according to the U. S. Weather Bureau.

SOIL MOISTURE

Moisture in the soils of the upper watershed areas of the Willamette Valley is still below the usual amounts accumulated by this date.

RESERVOIR STORAGE

Most reservoirs in the Willamette Basin are being held at low levels in accordance with usual operating plans which provide for interception of large amounts of flood water at this time of the year.

STREAMFLOW

Forecasts* of expected streamflow in the April through September period of 1968 are as follows:

Station	Volume Forecast	Percent of 1948-62 Average
Clackamas River - Estacada	786,000 acre ft.	88 percent
North Santiam - Mehama	963,000 " "	97 "
South Santiam - Waterloo	594,000 " "	88 "
McKenzie - Vida	1,210,000 " "	87 "
Willamette, Middle Fork	823,000 " "	85 "
Row River - Dorena	103,000 " "	92 "
Willamette - Salem	5,020,000 " "	90 "

*These forecasts assume average conditions of temperature and precipitation during the next four months.

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WATER SUPPLY OUTLOOK expressed as "Poor", "Foir" "Averoge" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Calapooya	Average	Fair
Clackamas	Average	Average
McKenzie	Average	Average
Molalla	Average	Fair
Santiam, North	Average	Average
Santiam, South	Average	Average
Willamette, Coast Fork	Average	Average
Willamette, Middle Fork	Average	Average

RESERVOIR STORAGE (1,000 Ac. Ft.) Feb. 1, 1968

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Cottage Grove	30.0*	0.5	7.7	1.6
Cougar	155.2*	0.7	27.7	- -
Detroit	299.9*	2.5	78.4	30.1[m]
Dorena	70.5*	0.4	31.3	5.6[m]
Fall Creek	115.0*	0.4	18.2	- -
Fern Ridge	94.2*	8.0	32.9	18.7
Foster	30.0*	0.2	- -	- -
Green Peter	270.0*	4.8	- -	- -
Hills Creek	200.0*	0.6	46.9	- -
Lookout Point	337.2*	1.5	54.6	26.9[m]
Timothy Lake	61.7	49.9	53.2	39.5

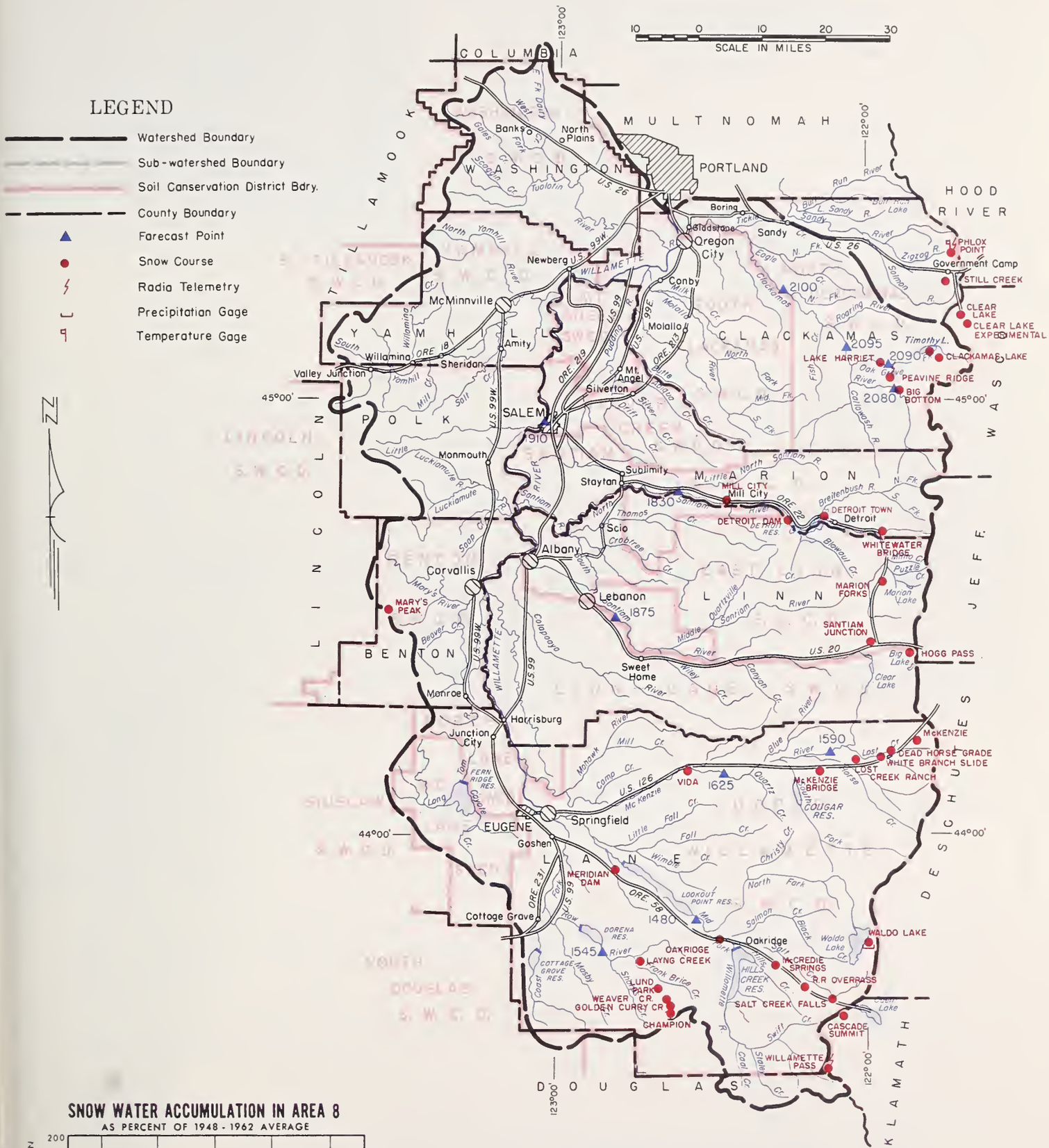
*Multiple purpose reservoir--space reserved primarily for flood runoff.

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of Feb. 1, 1968

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
2080	Clackamas at Big Bottom	130	April-July	150	87
		160	April-Sept.	184	87
2100	Clackamas at Estacada	670	April-July	770	87
		786	April-Sept.	890	88
2095	Clackamas above Three Lynx	504	April-July	584	86
		600	April-Sept.	683	88
1590	McKenzie at McKenzie Bridge	410	April-July	502	82
		540	April-Sept.	658	82
1625	McKenzie near Vida	990	April-July	1144	86
		1210	April-Sept.	1392	87
2090	Oak Grove Fork above Power Intake	124	April-July	147	84
		164	April-Sept.	190	86
1545	Row near Dorena	98	April-July	108	91
		103	April-Sept.	112	92
1830	Santiam, North at Mehama[d]	836	April-July	884	94
		963	April-Sept.	991	97
1875	Santiam, South at Waterloo	560	April-July	637	88
		594	April-Sept.	675	88
1840	Willamette, Mid. Fk. blw. N. Fk. nr. Oakridge[d]	734	April-July	863	85
		823	April-Sept.	968	85
1910	Willamette at Salem[d]	4390	April-July	5040	87
		5020	April-Sept.	5566	90

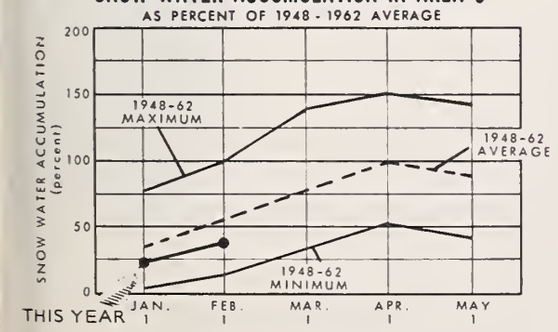
(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WILLAMETTE WATERSHEDS



SNOW WATER ACCUMULATION IN AREA 8

AS PERCENT OF 1948 - 1962 AVERAGE



Data from selected snow courses.
Measured about the first of each month

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	ELEVATION				LAST YEAR	1948-62 AVERAGE
Big Bottom	2118	NOT MEASURED			1.0	4.5 [h]
Cascade Summit	4880	2/1	54	13.8	21.5	21.9
Champion	4500	1/31	70	19.4	18.8	18.8
Clackamas Lake	3400	[c]				
Clear Lake	3500	1/31	14	2.8	4.6	6.9 [h]
Clear Lake (Experimental)	3500	1/31	30	5.9	8.5	12.1 [h]
Dead Horse Grade	3800	2/2	29	9.0	12.0	13.7 [h]
Detroit Town	1610	2/1	8	2.1	0.0	2.5 [h]
Detroit Dam	1580	2/1	3	1.0	0.0	0.8 [h]
Golden Curry Creek	3136	1/31	23	4.1	T	5.4 [h]
Hogg Pass	4755	2/1	73	21.8	27.4	29.0
Lake Harriet	2045	NOT MEASURED				
Layng Creek	1200	1/31	0	0.0	0.0	0.3 [m]
Lost Creek Ranch	1956	2/2	13	4.6	T	3.9 [h]
Lund Park	1740	1/31	T	T	0.0	1.5 [h]
Marion Forks	2730	2/1	43	11.2	8.9	10.5
Marys Peak	3620	[b]				
McCredie Springs	2120	2/1	0	0.0	0.0	1.2 [h]
McKenzie	4800	2/2	64	21.0	31.4	30.4
McKenzie Bridge	1372	2/2	T	T	0.0	1.7 [h]
Meridian Dam	750	2/1	0	0.0	0.0	T [h]
Mill City	826	2/1	0	0.0	0.0	0.2 [m]
Oakridge	1310	2/1	0	0.0	0.0	T [h]
Peavine Ridge	3500	1/31		9.5	10.8	12.5
Phlox Point	5400	1/30	61	20.0	41.1	39.7
Railroad Overpass	2750	2/1	T	T	0.0	3.4 [h]
Salt Creek Falls	4000	2/1	42	10.2	14.2	11.4 [h]
Santiam Junction	3990	2/1	60	17.0	17.0	17.8
Still Creek	3670	1/30	35	9.7	13.2	17.0
Timothy Lake	3295	NOT MEASURED				
Vida	800	2/2	0	0.0	0.0	0.5 [h]
Waldo Lake	5500	1/27	42	12.2	21.7	22.6 [h]
Weaver Creek	2440	1/31	9	1.6	0.0	1.6 [h]
White Branch Slide	2800	2/2	25	7.2	5.8	5.4 [h]
Whitewater Bridge	2175	2/1	20	5.8	2.2	5.3 [h]
Willamette Pass	5600	1/26	52	16.6	26.0	28.5 [h]

"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
ROGUE, UMPQUA, WATERSHEDS
OREGON

as of

FEBRUARY 1, 1968

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Farmers, ranchers and other water users in the Rogue-Umpqua area can expect 1968 spring and summer water supplies somewhat less than the usual amounts. Mountain snowpacks are below average; soil moisture is much poorer than usual; and stored water supplies are below the desired levels.

SNOW COVER

Water content of the mountain snowpack is about 74 percent of the 15-year average (1948-62). Generally there is 25 percent less snow water than last year.

PRECIPITATION

Winter precipitation, November 1 to February 1, is 73 percent of the average according to the U. S. Weather Bureau.

SOIL MOISTURE

Soils in all local watersheds are drier than usual and have not yet recovered from the extreme heat and drying of the past summer. These soils will absorb more than the usual amount of snow melt this spring.

RESERVOIR STORAGE

Howard Prairie Reservoir contains 39,200 acre feet compared with 32,200 acre feet last year. Hyatt Prairie has 9,000 acre feet compared with 10,500 a year ago. Emigrant Lake contains 19,300 acre feet compared with 29,600 acre feet one year ago.

Fish Lake is reported to contain 3,800 acre feet compared with 4,000 acre feet last year.

STREAMFLOW

Flow of the North Umpqua below Lemolo Reservoir is forecast at 144,000 acre feet or 77 percent of the 15-year average (1948-62) for the April through September period.

The Rogue at Raygold is forecast at 813,000 acre feet or 81 percent for the 6 months beginning with April first. Inflow to Hyatt Lake and Fourmile Lake for the same six months is forecast at 5,000 and 4,500 acre feet respectively.

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Little Butte, North Fork at Fish Lake is forecast at 13,600 acre feet or 85 percent average for the April-September period. Little Butte, South Fork near Lake Creek is forecast at 30,000 acre feet or 79 percent average for the April-July period. The flow of the South Fork will drop to 100 c.f.s. by about May 24th this year.

Applegate River near Copper is forecast at 130,000 acre feet or 92 percent average, and Illinois River near Kerby is forecast at 194,000 acre feet or 95 percent--both for the April-September period.

WATER SUPPLY OUTLOOK expressed as "Poor","Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Althouse Creek	Average	Average
Applegate River, Big	Average	Average
Applegate River, Little	Average	Average
Ashland Creek	Average	Fair
Butte Creek, Big	Average	Fair
Butte Creek, Little	Average	Fair
Cow Creek	Fair	Fair
Deer Creek	Average	Fair
Elk Creek	Average	Fair
Emigrant Creek (abv. Res.)	Average	Fair
Evans Creek	Average	Fair
Gold Hill Irrigation Dist.	Average	Average
Grants Pass Irrig. Dist.	Average	Average
Grave Creek	Average	Fair
Illinois River, East Fork	Average	Average
Illinois River, West Fork	Average	Average
Jump-off-Joe Creek	Average	Fair
Neil Creek	Average	Fair
Red Blanket Creek	Average	Fair
Rogue River	Average	Fair
Sucker Creek	Average	Fair
Table Rock Irrig. Dist.	Average	Average
Thompson Creek	Average	Fair
Wagner Creek	Average	Fair
Williams Creek	Average	Fair

RESERVOIR STORAGE (1,000 Ac. Ft.) Feb. 1, 1968

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Emigrant Gap	39.0	19.3	29.6	22.5*
Fish Lake	7.8	3.8	4.0	5.1
Fourmile Lake	16.1	[b]	4.1	8.5
Howard Prairie	60.0	39.2	33.5	- -
Hyatt Prairie	16.1	9.0	10.5	7.1

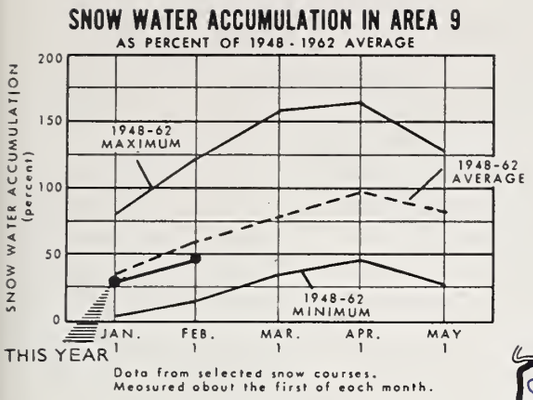
*Average for years of record after reconstruction.

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of Feb. 1, 1968

FORECAST POINT NO.	FORECAST POINT NAME	FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
3620	Applegate near Copper	130	April-Sept.	142	92
3145	Clearwater above Trap Creek[d]	64	April-Sept.	75	85
5045	Fourmile Lake net Inflow[d]	4.5	April-Sept.	5.3	85
		5.4	Feb.-Sept.	6.4	84
5140	Hyatt Reservoir net Inflow[d]	5.0	April-Sept.	5.8	86
3771	Illinois River near Kerby	317	March-July	348	91
		194	April-Sept.	212	95
3425	Little Butte, N. Fk. at Fish Lake nr. Lake Cr.[d]	13.6	April-Sept.	16.0	85
3415	Little Butte, S. Fork near Lake Creek	30	April-July	38	79
	Note: Minimum flow will drop to 100 c.f.s. by May 24.				
3280	Rogue at Prospect	269	April-July	295	91
3320	Rogue, South Fork near Prospect[d]	54	April-July	70	77
		67	April-Sept.	82	82
3350	Rogue below South Fork	482	April-July	611	79
		600	April-Sept.	754	80
3590	Rogue at Raygold near Central Point	676	April-July	837	81
		813	April-Sept.	1001	81
3615	Rogue at Grants Pass	806	April-Sept.	993	81
3135	Umpqua, No. blw. Lemolo Res. nr. Toketee Falls[d]	144	April-Sept.	186	77

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

ROGUE, UMPQUA WATERSHEDS



LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- ▲ Forecast Point
- ● Snow Course
- ⌴ Precipitation Gage
- ϟ Radio Telemetry

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	ELEVATION				LAST YEAR	1948-62 AVERAGE
Althouse	4530	NOT	MEASURED		5.9	4.7 h
Annie Spring	6018	1/29	69	21.2	29.1	29.4
Beaver Dam Creek	5100	1/30	36	9.7	11.8	- -
Big Red Mountain	6500	1/25	46	17.4	25.4	20.8 h
Billie Creek Divide	5300	1/26	35	10.0	13.4	16.7 h
Caliban	6500	2/1	81	27.0	27.5	- -
Champion	4500	1/31	70	19.4	18.8	18.8
Cold Springs Camp	6100	1/29	56	15.4	22.4	- -
Deadwood Junction	4600	1/30	31	7.2	8.4	- -
Diamond Crater Summit	5800	1/23	37	12.6	19.5	- -
Diamond Lake	5315	1/23	26	9.8	12.6	16.7
Fish Lake	4865	2/4	27	8.5	- -	10.6 h
Fourmile Lake	6000	c				
Grayback Peak	6000	2/1	63	17.7	18.5	17.9 h
Howard Prairie	4500	1/30	33	8.6	8.7	- -
Hyatt Prairie Reservoir	4900	1/30	23	6.4	6.8	6.6 h
King Mountain #1	4500	1/25	16	6.6	- -	- -
King Mountain #2	4000	1/25	20	8.0	- -	- -
King Mountain #3	3648	1/25	T	T	- -	- -
King Mountain #4	3049	1/25	0	0.0	0.0	- -
King Mountain #5	2380	1/25	0	0.0	0.0	- -
King Mountain #6	1820	1/25	0	0.0	0.0	- -
Little Red Mountain	6500	1/25	37	14.3	20.4	15.1 h
Mt. Ashland Switchback	6400	2/1	85	27.0	26.0	- -
North Umpqua	4215	1/30	45	9.3	11.7	11.7 h
Page Mountain	4045	1/29	18	2.6	3.4	4.0 h
Park Headquarters	6450	1/29	84	25.6	37.7	37.3
Red Butte #1	4560	1/24	27	9.3	- -	- -
Red Butte #2	4000	1/24	18	6.5	- -	- -
Red Butte #3	3500	1/24	T	T	2.0	- -
Red Butte #4	3000	1/24	0	0.0	2.0	- -
Red Butte #5	2500	1/24	0	0.0	0.0	- -
Red Butte #6	2000	1/24	0	0.0	0.0	- -
Seven Lakes #1	6800	1/31	67	21.4	40.0	36.9 h
Seven Lakes #2	6200	1/30	58	16.7	30.3	27.2 h
Silver Burn	3720	1/28	33	10.2	10.4	10.5
Siskiyou Summit	4630	1/28	21	8.0	9.5	6.8
Ski Bowl Road	6000	2/1	78	22.6	23.3	- -
South Fork Canal	3500	1/29	8	1.7	2.6	3.4
Trap Creek	3800	1/30	35	8.5	11.0	9.8 h
Whaleback	5140	1/30	84	19.5	22.2	23.1 h
Windigo Pass	5800	1/25	36	12.4	27.7	29.4 h

"The Conservation of Water begins with the Snow Survey"

Area 10

WATER SUPPLY OUTLOOK
KLAMATH WATERSHEDS
OREGON

as of

FEBRUARY 1, 1968

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Streamflow in Klamath Basin in 1968 will be much below average but, because of stored water supplies now on hand, the irrigators of the region can expect near average water for their lands. Mountain snowpacks are below the February first average; soil moisture is lower than usual but stored water supplies are good.

SNOW COVER

Water content of mountain snowpacks totals about 73 percent of the 15-year average for February first. The eastern edge of the Klamath Basin has more snow, compared with the average, than the west side which is much below average.

PRECIPITATION

Winter precipitation, November 1 to February 1, is about 62 percent of the average according to the U. S. Weather Bureau.

SOIL MOISTURE

Moisture in the upper watershed soils under the snowpack is only 63 percent of capacity--much drier than last year and the average.

RESERVOIR STORAGE

Upper Klamath Lake contains 320,300 acre feet of water compared with 335,000 acre feet last year. A total inflow to the lake of 612,000 acre feet is forecast for the February-September period.

Gerber Reservoir now holds 44,800 acre feet compared with 39,200 a.f. last year and Clear Lake Reservoir holds 182,000 acre feet compared with 176,400 acre feet a year ago. Inflow to both of these reservoirs is expected to be about 140 to 150 percent average in the February-June period.

STREAMFLOW

Flow into Upper Klamath Lake in the April through September period is forecast at 500,000 acre feet or 78 percent of the 15 year average (1948-62). Flow of Sprague River is forecast at 185,000 acre feet or 64 percent average and the Williamson below Sprague River is forecast at 327,000 acre feet or 67 percent average--all for the six months following April first.

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Inflow to Gerber and Clear Lake Reservoirs for the February through June period is forecast at 73,000 acre feet (152 percent) and 137,000 acre feet (140 percent), respectively.

These forecasts assume that near average conditions of temperature and precipitation will prevail in the next four months.

WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Ft. Klamath Valley	Fair	Fair
Lost River (Clear Lake)	Average	Average
Lost River (Gerber)	Average	Average
Lost River (Willow Res.)	Average	Average
Sprague River	Fair	Fair
Upper Klamath Lake	Average	Average
Williamson River	Fair	Fair

RESERVOIR STORAGE (1,000 Ac. Ft.) Feb. 1, 1968

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Clear Lake	440.2	182.0	176.4	188.4
Gerber	94.0	44.8	39.2	30.5
Upper Klamath Lake	584.0	320.3	335.0	347.1

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of Feb. 1, 1968

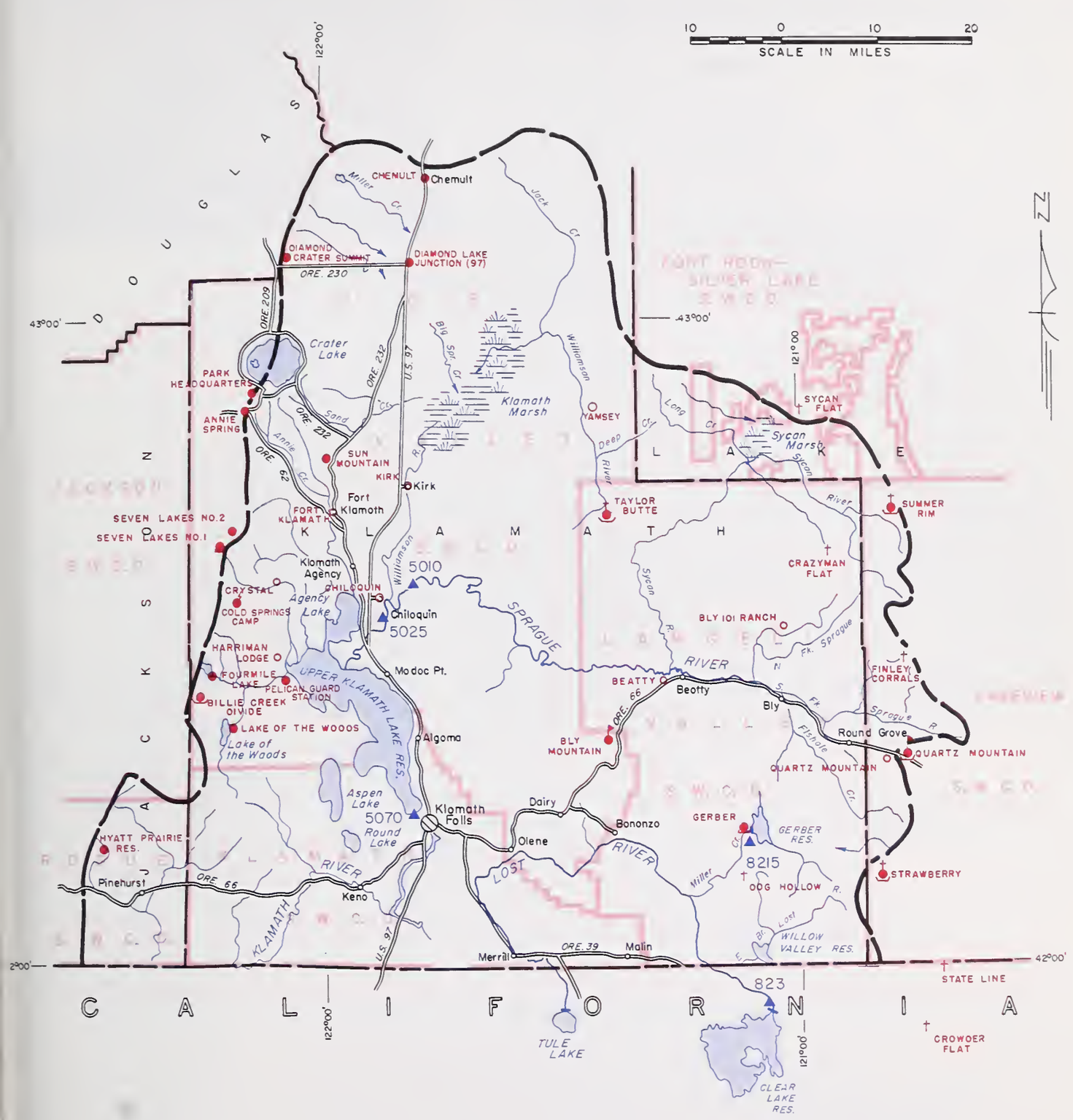
FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
923	Clear Lake Reservoir Inflow[k]	137	Feb.-June	98	140
8215	Gerber Reservoir Inflow[k]	73	Feb.-June	48	152
5010	Sprague near Chiloquin	230	Feb.-Sept.	390	59
		185	April-Sept.	289	64
5070	Upper Klamath Lake net Inflow[k]	612	Feb.-Sept.	1002	61
		500	April-Sept.	639	78
5025	Williamson below Sprague River	425	Feb.-Sept.	683	62
		327	April-Sept.	490	67

SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Bly Mountain	5090	42	14.0	1/22	8.8	9.9	- -

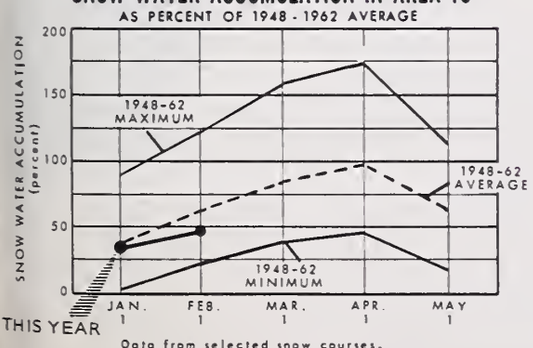
(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

KLAMATH WATERSHEDS



SNOW WATER ACCUMULATION IN AREA 10

AS PERCENT OF 1948 - 1962 AVERAGE



Data from selected snow courses.
Measured about the first of each month.

LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- Forecast Point
- Snow Course
- Aerial Snow Depth Gage
- COPCO Snow Station
- Soil Moisture Station
- Precipitation Gage
- Radio Telemetry

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
					WATER CONTENT (Inches)	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	LAST YEAR	1948-62 AVERAGE
Annie Spring	6018	1/29	69	21.2	29.1	29.4
Beatty (PP&L)	4300	1/31	T	T	0.0	0.4
Billie Creek Divide	5300	1/26	35	10.0	13.4	16.7 h
Bly Mountain	5090	1/22	17	5.0	4.3	4.5 m
Bly 101 Ranch (PP&L)	4800				1.1	1.8
Chemult	4760	1/30	33	6.0	10.0	9.1
Chiloquin (PP&L)	4187	1/31	6	-	0.9	2.2
Cold Springs Camp	6100	1/29	56	15.4	22.4	- -
Crazyman Flat e	6100	2/1	20	5.0	9.5	6.2 m
Crowder Flat e (Calif.)	5200	1/24	10	2.5	3.1	2.7 m
Crystal (PP&L)	4200	1/30	23	6.4	7.6	7.6
Diamond-Crater Summit	5800	1/23	37	12.6	19.5	- -
Diamond Lake Junction (97)	4600	1/23	12	3.9	3.6	- -
Dog Hollow e	4900	1/24	3	0.8	0.0	1.0 m
Finley Corrals e	6000	2/1	36	9.0	11.8	10.2 m
Fort Klamath (PP&L)	4150	1/30	14	4.4	5.2	4.1
Fourmile Lake	6000	c				
Gerber	4850	1/31	11	3.6	3.4	2.4 h
Harriman (PP&L)	4200	1/30	23	-	4.1	3.7
Hyatt Prairie Reservoir	4900	1/30	23	6.4	6.8	6.6 h
Kirk (PP&L)	4533	1/30	23	6.0	- -	6.1
Lake of the Woods	4960	1/26	22	6.3	6.0	9.6
Park Headquarters	6450	1/29	84	25.6	37.7	37.3
Pelican Guard Station	4150	1/26	14	3.6	2.1	- -
Quartz Mountain	5320	1/30	25	6.1	7.0	5.6
Quartz Mountain (PP&L)	5504	1/30	30	7.2	8.4	5.3
Seven Lakes #1	6800	1/31	67	21.4	40.0	36.9 h
Seven Lakes #2	6200	1/30	58	16.7	30.3	27.2 h
State Line e (Calif.)	5750	1/24	14	3.5	6.2	6.0 m
Strawberry e	5760	2/5	23	6.9	7.8	6.6 h
Summer Rim e	7200	2/1	36	9.0	15.1	8.3 m
Sun Mountain	5350	1/24	32	10.0	10.6	18.4
Sycan Flat e	5500	2/1	18	4.5	8.1	5.6 m
Taylor Butte	5100	1/25	11	3.4	4.9	4.7 h
Yamsey (PP&L)	4600	b			- -	3.6

"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
LAKE COUNTY, GOOSE LAKE WATERSHEDS
OREGON

as of

FEBRUARY 1, 1968

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Outlook for 1968 spring and summer water supplies in Lake County is somewhat below the average with precipitation and mountain snowpacks much below the average, soil moisture very low, and reservoired water supplies slightly below average.

SNOW COVER

Water content of the mountain snowpack is above the usual amounts at high elevations and below average at low stations, but averages out at 94 percent of the amount usually on hand by February first.

PRECIPITATION

Winter precipitation, November 1 to February 1, is about 68 percent of the usual amount, while January brought near normal amounts.

SOIL MOISTURE

Moisture in the upper watershed soils under the snowpack is only 54 percent of capacity which is nearly the driest on record. These dry soils will soak up 4 to 8 inches of snowmelt water in the spring.

RESERVOIR STORAGE

Drews Valley Reservoir contained about 35,900 acre feet of water on February first compared with 26,900 acre feet last year on this date. Cottonwood held only 900 acre feet compared with 700 plus acre feet in 1967. Both reservoirs can expect to receive substantial runoff from their watersheds.

Thompson Valley Reservoir has between 11,000 and 12,000 acre feet in storage. It was erroneously reported to contain 17,000 acre feet one month ago.

STREAMFLOW

Flow into Drews Reservoir is forecast at 46,000 acre feet or 98 percent average for the March-July period of 1968.

Flow of Warner Valley streams are forecast to flow as follows:

Twentymile Creek, 24,000 acre feet or 86 percent average for March-June
Deep Creek, 69,000 acre feet or 88 percent average for March-June
Honey Creek, 15,000 acre feet or 83 percent average for March-June.

Flow of the Chewaucan River is forecast at 75,000 acre feet or 84 percent average for the March-June period.

Flow of Silver Creek near Silver Lake is forecast at 20,000 acre feet or 86 percent average for March-July.

The above forecasts assume near average conditions of temperature and precipitation will prevail in the next four months.

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WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Chewaucan River	Average	Average
Crooked Creek	Fair	Fair
Deep Creek	Average	Fair
Dry Creek	Average	Fair
East Side Goose Lake	Average	Fair
Guano Lake	Average	Fair
Honey Creek	Average	Fair
Lakeview Water Users Assn.	Average	Average
Rock Creek (Hart Mtn.)	Average	Fair
Silver-Buck Creeks	Average	Fair
Summer Lake	Average	Average
Thomas Creek	Average	Average
Twentymile Creek	Average	Fair
Warner Lakes	Average	Fair

RESERVOIR STORAGE (1,000 Ac. Ft.) Feb. 1, 1968

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Cottonwood	8.7	0.9	- -	2.3*
Drews	63.0	35.9	26.9	32.5
Thompson Valley	17.4	*b*	- -	- -

*Average for years of record after reconstruction.

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of February 1, 1968

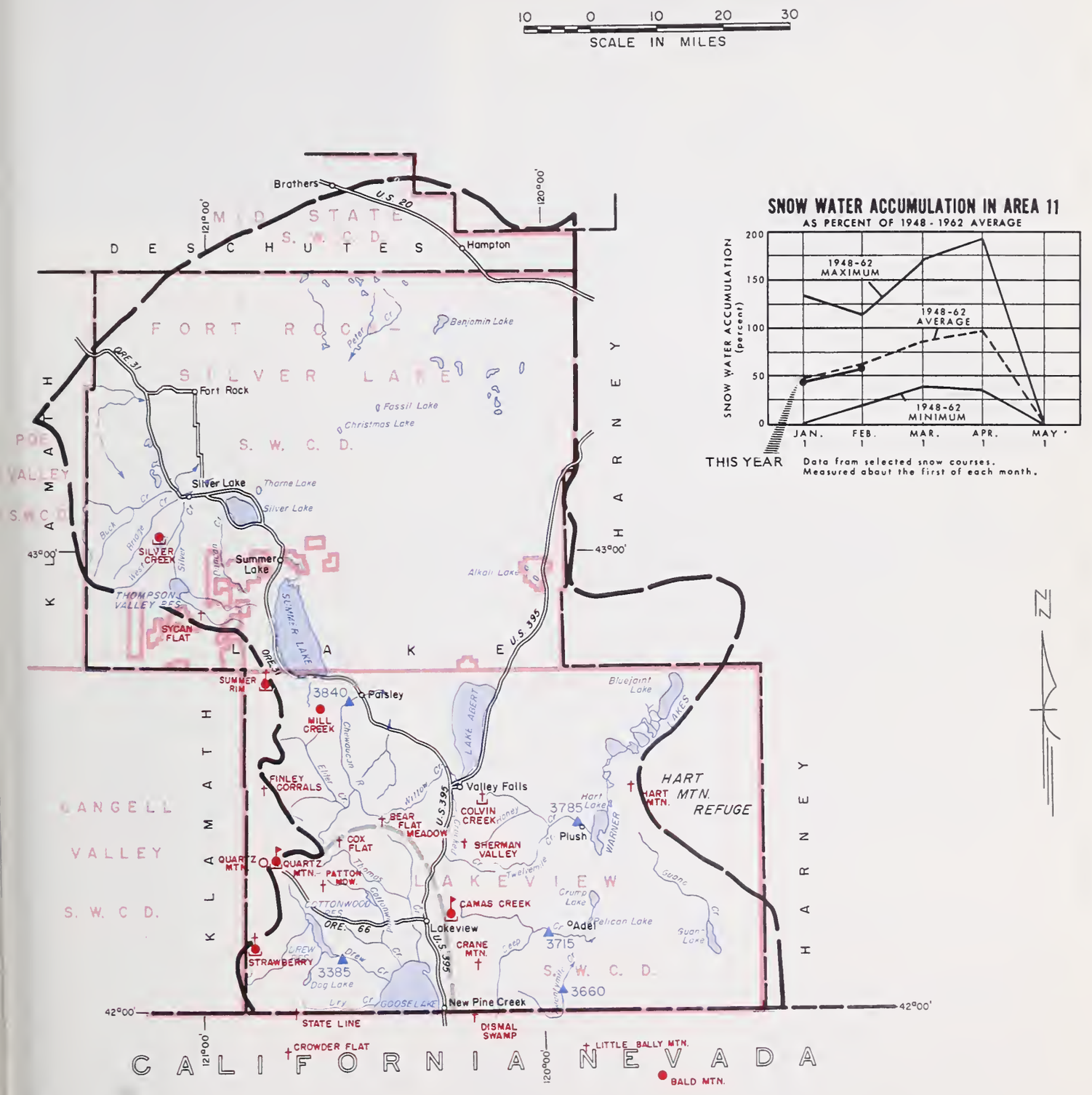
FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
3840	Chewaucan near Paisley	75	March-June	89	84
3715	Deep above Adel	69	March-June	78	88
3385	Drews Reservoir net Inflow	46	March-July	47	98
3785	Honey Creek near Plush	15.0	March-June	18.0	83
3900	Silver Creek near Silver Lake	20	March-July	21	86
3660	Twentymile near Adel	24	March-June	28	86

SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Camas Creek	5720	42	14.5	1/31	10.1	12.0	11.4
Quartz Mountain	5320	48	15.3	1/30	5.8	8.9	7.0

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

LAKE COUNTY, GOOSE LAKE WATERSHEDS



LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- Forecast Point
- Snow Course
- Aerial Snow Depth Gage
- COPCO Snow Station
- Soil Moisture Station
- Precipitation Gage

Lake County, Goose Lake Watersheds

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
					WATER CONTENT (Inches)	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	LAST YEAR	1948-62 AVERAGE
Adin Mountain (Calif.)	6350	1/29	32	9.0	11.2	8.4
Bald Mountain (Nev.)	6720	[c]				
Bear Flat Meadow [e]	5900	2/1	25	6.2	9.5	5.2 [m]
Camas Creek	5720	1/31	29	7.3	9.2	7.9
Cedar Pass (Calif.)	7100	2/1	41	10.8	11.1	10.2
Colvin Creek [e]	6550	2/1	4	1.0	5.6	- -
Cox Flat [e]	5750	2/1	24	6.0	3.0	5.2 [m]
Crane Mountain [e]	6020	1/26	4	1.0	1.7	4.1 [m]
Crowder Flat [e] (Calif.)	5200	1/24	10	2.5	3.1	2.7 [m]
Dismal Swamp [e] (Calif.)	7000	1/26	22	5.5	13.4	8.2 [m]
Finley Corrals [e]	6000	2/1	36	9.0	11.8	10.2 [m]
Hart Mountain [e]	6350	2/1	4	1.0	1.1	0.9 [m]
Little Bally Mountain [e] (Nev.)	6600	1/26	6	1.5	3.4	- -
Mill Creek	6200	[c]				
Patton Meadows [e]	6800	2/1	30	7.5	12.9	- -
Quartz Mountain (PP&L)	5504	1/30	30	7.2	8.4	5.3
Quartz Mountain	5320	1/30	25	6.1	7.0	5.6
Sherman Valley [e]	6600	2/1	22	5.5	8.4	7.4 [m]
Silver Creek	4900	1/29	8	1.5	2.7	3.4 [h]
State Line [e] (Calif.)	5750	1/24	14	3.5	6.2	6.0 [m]
Strawberry	5760	2/5	23	6.9	7.8	6.6 [h]
Summer Rim [e]	7200	2/1	36	9.0	15.1	8.3 [m]
Sycan Flat [e]	5500	2/1	18	4.5	8.1	5.6 [m]

"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
HARNEY BASIN WATERSHEDS
OREGON

as of

FEBRUARY 1, 1968

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

Ranchers and other water users in Harney Basin can expect only fair to poor water supplies in the spring-summer of 1968. Mountain snowpacks and winter precipitation are far below the usual measured amounts, and watershed soils are extremely dry.

SNOW COVER

Water content of the mountain snowpack is only 62 percent of the 15-year average (1948-62) basin-wide and is poorest in the southern half.

PRECIPITATION

Winter precipitation, November 1 to February 1, has been only 56 percent of average according to the U. S. Weather Bureau.

SOIL MOISTURE

Soils in the upper watersheds under the snowpack are now wet up to 56 per cent of capacity compared with 78 percent last year. This is extremely dry and indicates that the soils will absorb between 3 to 8 inches of snowmelt water this spring.

STREAMFLOW

Forecasts of expected streamflow for the April-September period of 1968 are as follows:

Station	Volume	Percent of 1948-62 Average
Silvies River near Burns	45,000 acre ft.	45 percent
*Silver Creek near Riley	12,000 " "	54 "
Donner und Blitzen River	33,000 " "	53 "
Trout Creek near Denio	5,000 " "	60 "

These forecasts assume that near average conditions of temperature and precipitation will prevail in the next four months.

*April-July

Report prepared by
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WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Catlow Valley	Fair	Poor
Cow Creek	Fair	Poor
Donner und Blitzen River	Fair	Poor
Mill-Coffeepot Creeks	Fair	Poor
Rattlesnake Creek	Fair	Poor
Silver Creek	Fair	Poor
Silvies River	Fair	Poor
Soldier-Prather Creek	Fair	Poor
Trout Creek	Fair	Poor
Whitehorse Creek	Fair	Poor

RESERVOIR STORAGE (1,000 Ac. Ft.) Feb. 1, 1968

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of February 1, 1968

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
3960	Donner und Blitzen near Frenchglen	30	March-June	59	51
		33	April-Sept.	62	53
4030	Silver near Riley	12.0	April-July	22	54
3935	Silvies River near Burns	60	March-June	116	52
		45	April-Sept.	99	45
4065	Trout Creek near Denio	5.4	March-July	8.7	62

SOIL MOISTURE

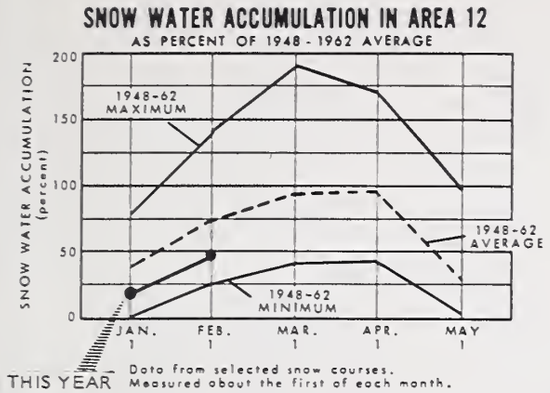
STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Blue Mountain Spring	5900	42	16.9	1/30	7.7	9.7	6.8
Fish Creek	7900	48	15.0	c		- -	- -
Folly Farm	4450	30	12.5	c		- -	- -
Silvies	6900	48	16.4	c		- -	- -
Snow Mountain	6300	48	16.7	b		14.3	12.0
Starr Ridge	5150	36	10.6	1/29	7.8	10.4	6.4
Stinking Water	4800	48	21.9	b		- -	- -
Willow-Bald	5000	24	6.6	1/29	3.5	6.4	3.8

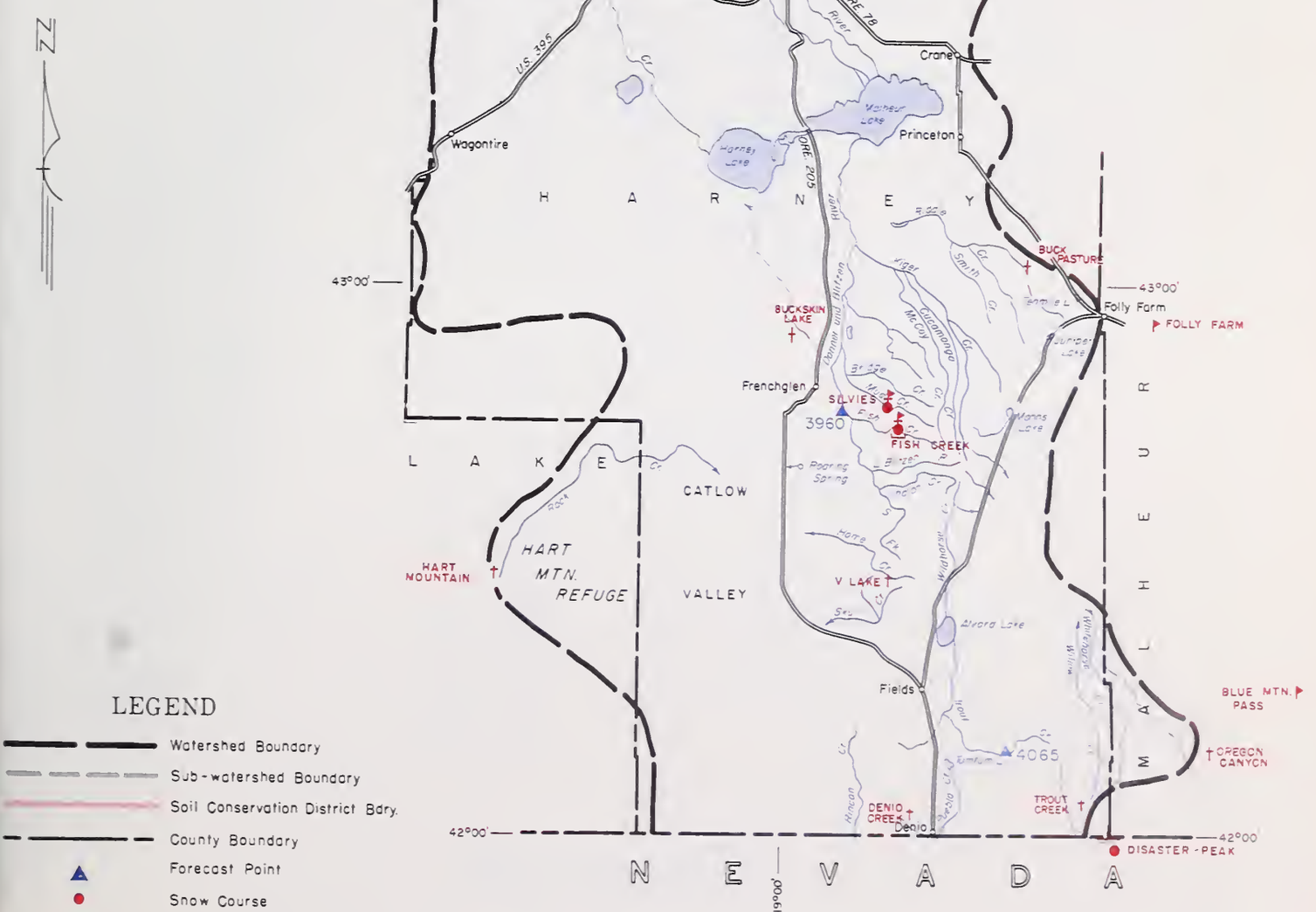
SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches) LAST YEAR	1948-62 AVERAGE
Blue Mountain Springs	5900	1/30	32	7.4	10.8	10.8
Buck Pasture[e]	5700	2/4	T	T	2.7	- -
Buckskin Lake[e]	5200	2/4	0	0.0	T	- -
Call Meadows[e]	5340	2/4	4	0.8	3.0	- -
Crow Camp[e]	5500	2/4	0	0.0	1.2	- -
Delintment Lake	5600	NOT MEASURED			6.2	- -
Denio Creek[e]	6000	2/4	0	0.0	1.2	- -
Disaster Peak (Nev.)	6500	c				
Emigrant Butte	5000	1/29	3	0.6	4.0	- -
Fish Creek[e]	7900	2/4	15	3.0	17.1	- -
Hart Mountain[e]	6350	2/1	4	1.0	1.1	0.9[m]
Idlewild Camp	5200	1/31	10	2.6	4.2	4.2
Izee Summit	5293	1/29	13	2.9	6.5	6.2[h]
Lake Creek R. S.	5120	1/29	24	4.4	7.0	5.8[m]
Oregon Canyon[e]	6950	2/4	6	1.2	8.4	- -
Rock Spring	5100	1/31	14	3.8	4.0	4.2
Silvies[e]	6900	2/4	8	1.6	9.6	- -
Snow Mountain	6300	NOT MEASURED			10.9	- -
Starr Ridge	5150	1/29	9	2.0	3.6	4.6[h]
Stinking Water	4800	1/30	11	1.9	2.0	3.3[h]
Trout Creek[e]	7800	2/4	6	1.2	9.6	- -
"V" Lake[e]	6600	2/4	1	0.2	6.6	- -

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

HARNEY BASIN WATERSHEDS





LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- ▲ Forecast Point
- ● Snow Course
- † Aerial Snow Depth Gage
- ⚑ Soil Moisture Station
- ⊔ Precipitation Gage

OWYHEE, MALHEUR WATERSHEDS (1)

Owyhee River

Number	Name		Sec.	Twp.	Rge.	Elev.
16H6	Antalope Ridga	(Ida)	20	8S	1E	5900
16G9a	Battle Creek	(Ida)	10	11S	1E	5700
15H1MA	Bear Creek	(Nev)	31	46N	58E	7800
15H4MP	Big Bend	(Nev)	30	45N	56E	6700
17H2m	Blue Mtn Pass		4	38S	42E	5290
17H2	Buckskin, Lowar	(Nev)	25	45N	39E	6700
17H1	Buckskin, Upper	(Nev)	11	45N	39E	7200
16G10a	Bull Basin	(Ida)	29	12S	5W	5600
16H6a	Columbia Basin	(Nev)	31	44N	53E	6650
18H1	Disaster Peak	(Nev)	8	47N	34E	6500
16H8a	Fawn Creek	(Nev)	2	45N	52E	7000
18G2MA	Fish Craak		4	33S	33E	7900
16G3m	Folly Farm Summit		8	30S	38E	4450
15H2	Fox Creek	(Nev)	33	46N	58E	6800
15H7	Fry Canyon	(Nev)	31	43N	54E	6700
15H5	Gold Creek	(Nev)	31	45N	56E	6600
17H4	Granite Peak	(Nev)	22	44N	39E	7800
16G5a	Hyde Pasture	(Ida)	31	8S	2W	5800
16H1M	Jack Creek, Lower	(Nev)	18	42N	53E	6800
16H2	Jack Creek, Upper	(Nev)	9	42N	53E	7250
16H4	Jack Peak	(Nev)	28	42N	53E	8420
17G3m	Jordan Valley		0	30S	46E	4390
17H5	Lamanca Creek	(Nev)	13	42N	38E	6000
16H5	Laurel Draw	(Nev)	20	45N	53E	6700
17G6a	Lookout Butte		2	40S	47E	5650
17G4a	Louse Canyon		27	40S	44E	6440
17H3	Martin Creek	(Nev)	18	44N	40E	6700
15H20a	Merritt Mountain	(Nev)	10	46N	54E	7000
16H3AP	Midas	(Nev)	18	39N	46E	7200
16G7M	Mud Flat	(Ida)	34	9S	2W	5500
17G5a	Oregon Canyon		8	40S	40E	6950
17H6a	Quinn Ridge	(Nev)	9	47N	41E	6300
16G11ap"	Red Canyon	(Ida)	32	11S	4W	6500
15H6MP	Rodeo Flat	(Nev)	36	43N	53E	6800
15H3A	76 Creek	(Nev)	6	44N	58E	7100
16F3AP"	Silver City	(Ida)	6	5S	3W	6400
18G1MA	Silvies		35	32S	32¾E	6900
16G1	South Mountain No.2	(Ida)	10	2S	5W	6340
16F6a	Succor Creek	(Ida)	25	3S	5W	6100
15H9MP	Taylor Canyon	(Nev)	35	39N	53E	6200
16H7a	Toa Jam	(Nev)	29	40N	50E	7700
15H8	Tremewan Ranch	(Nev)	9	39N	55E	5700
16G4MA	Triangle	(Ida)	25	7S	3W	5150
18G5a	Trout Creek		10	41S	38E	7800
18G7a	"V" Lake		31	35½S	32¾E	6600
16G12a	Vaught Ranch	(Ida)	10	11S	1W	5950
16G13a	War Eagle	(Ida)	20	5S	3W	7700

Malheur River

Number	Name	Sec.	Twp.	Rge.	Elev.
18E14	Barney Creek	16	14S	36E	5950
18E16MP	Blue Mountain Spring	21	15S	35E	5900
18F6a	Buck Pasture	21	29S	35E	5700
18E21a	Bully Creak	10	17S	37E	5300
18F7a	Call Meadows	29	20S	33E	5340
17F2a	Cottonwood-Indian	10	19S	39E	4320
18E19M	Crane Prairie	24	16S	34E	5375
18F8a	Crow Camp	Unsurveyed			
18E20	Eldorado Pass	20	14S	38E	4600
18E26a	Flag Prairie	32	16S	36E	4750
18E18	Lake Creek	10	16S	33½E	5120
18E22a	Logan Valley	13	16S	33½E	5100
18F1	Rock Spring	23	18S	32E	5100
18E32p'	S. Fk. Willow Cr.	2	16S	37E	5500
18F4MP	Stinking Water	33	21S	34E	4800

BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS (2)

Burnt River

Number	Name	Sec.	Twp.	Rge.	Elev.
18E14	Barney Creek	16	14S	36E	5950
18E13M	Blue Mountain Summit	6	12S	36E	5098
17E1MP	Dooley Mountain	32	11S	40E	5430
18E20	Eldorado Pass	20	14S	38E	4600
18E8	Gold Center	21	9S	36E	5340
18E9	Tipton	34	10S	35½E	5100

Powder River

Number	Name	Sec.	Twp.	Rge.	Elev.
18E1	Anthony Lake	18	7S	37E	7125
18E33	Anthony Ski Hill				
18E5	Bourne	33	8S	37E	5800
17E1MP	Dooley Mountain	32	11S	40E	5430
18E3	Eilertson Meadows	18	8S	38E	5400
18E8	Gold Center	21	9S	36E	5340
18E6A	Goodrich Lake	4	9S	38E	6775
18E29	Intake House	5	8S	38E	4930
17D12m	Ladd Summit	5	5S	39E	3730
18E23	Little Alps	10	7S	37E	6200
18E30	Littla Antone	1	7S	37E	5000
18E28	Power Plant	33	7S	38E	3990
17D7	Taylor Green	3	6S	42E	5740

Pine Creek

Number	Name	Sec.	Twp.	Rge.	Elev.
17D8	Schneider Meadows	35	6S	45E	5400

Grande Ronde River

Number	Name	Sec.	Twp.	Rge.	Elev.
17D1	Aneroid Lake No. 1	16	4S	45E	7480
17D2P	Aneroid Lake No. 2	16	4S	45E	7300
18E1	Anthony Lake	18	7S	37E	7125
17D10a	Bald Mountain	14	4S	41E	6700
18D9	Beaver Reservoir	8	5S	37E	5340
18D8P	County Line	28	4S	34E	4800
18D6P	Lucky Strike	28	3S	32E	5050
18D5	Meacham	24 & 25	1S	35E	4300
17D13a	Mirror Lake	34	4S	44E	8200
17D6M	Moss Spring	28	3S	41E	5850
18D7	Schoolmarm	28	4S	34E	4775
17D11a	Standley	28	2S	42E	7400
17D7	Taylor Green	3	6S	42E	5740
18D3M	Tollgate	31	4N	38E	5070
17D15a	TV Ridge	12	2S	43E	7000

Imnaha River

Number	Name	Sec.	Twp.	Rge.	Elev.
17D1	Aneroid Lake No. 1	16	4S	45E	7480
17D2P	Aneroid Lake No. 2	16	4S	45E	7000
17D14a	Big Sheep	33	4S	46E	6200

UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS (3)

Umatilla River

Number	Name	Sec.	Twp.	Rge.	Elev.
19D2P	Arbuckle Mountain	33	4S	29E	5400
18D14m	Athena-Weston Summit	21	4N	35E	1700
18D12MP	Battle Mountain Summit	29	3S	31E	4340
18D4M	Emigrant Springs	29	1N	35E	3925
18D6P	Lucky Strike	28	3S	32E	5050
18D5	Meacham	24 & 25	1S	35E	4300
18D3M	Tollgate	32	4N	38E	5070
18D13	Walla Walla Diversion	22	6N	38E	2400

Walla Walla River

Number	Name	Sec.	Twp.	Rge.	Elev.
18D16	Blue Mountain Camp	35	4N	37E	4300
18D3M	Tollgate	32	4N	38E	5070
18D17	Weston Mountain	25	4N	35E	2700

Willow Creek

Number	Name	Sec.	Twp.	Rge.	Elev.
19D2P	Arbuckle Mountain	33	4S	29E	5400
18E1P	Anthony Lake	18	7S	37E	7125

UPPER JOHN DAY WATERSHEDS (4)

Upper John Day River

Number	Name	Sec.	Twp.	Rge.	Elev.
19D2P	Arbuckle Mountain	33	4S	29E	5400
18D12MP	Battle Mountain Summit	29	3S	31E	4340
19E2M	Beech Creek Summit	4	12S	30E	4800
18E16MP	Blue Mountain Spring	21	15S	35E	5900
18E13M	Blue Mountain Summit	6	12S	36E	5098
19E3MP	Derr	14	13S	23E	5670
18E27a	East Fork Canyon	15	15S	32E	5700
18E8	Gold Center	21	9S	36E	5340
18E24a	Indian Cr. Butte	5	15S	33E	6550
19E9P	Izee Summit	28	16S	29E	5293
18D6P	Lucky Strike	28	3S	32E	5050
20E1MP	Marks Creek	25	12S	19E	4540
20E2	Ochoco Meadows	21	13S	20E	5200
18E7	Olive Lake	14	9S	34E	6000
18D7	Schoolmarm	28	4S	34E	4775
19F1M	Snow Mountain	1	19S	26E	6300
19E7M	Starr Ridge	20	15S	31E	5150
18E9	Tipton	34	10S	35½E	5100
18E25MP	Williams Ranch	20	15S	32E	4500

UPPER DESCHUTES, CROOKED WATERSHEDS (5)

Upper Deschutes River

Number	Name	Sec.	Twp.	Rge.	Elev.
21E11	Black Pine Spring	14	16S	9E	4600
21F8	Caldwell Ranch	30	21S	8E	4400
22F3	Cascade Summit	7	23S	6E	4880
21F11	Chemult	21	27S	8E	4760
21F20P	Daer Craak	25	20S	7E	4554
21F14	Fire Road	36	21S	11E	5050
21E6	Hogg Pass	24	13S	7½E	4755
21F4	Hungry Flat	30	18S	11E	4400
21F6 *	Irish-Taylor	25	20S	6E	5500
21F17	Mowich	29	25S	25E	4700
21F10	New Crescent Lake	11	24S	6E	4800
21F19P	New Dutchman Flat #2	21	18S	9E	6400
21F13P	Paulina Lake	34	21S	12E	6330
21F15	Paulina Prairia	28	21S	11E	4285
21F3	Tangent	28	18S	10E	5400
21E15	Three Creaks Butte	27	16S	9E	5200
21E13	Three Creak Meadows	34	16S	9E	5650
22F2P	Waldo Lake	15	21S	6E	5500
22F14 *	Willamette Pass	33	24S	5½E	5600
22F15	Windigo Pass	32	25S	6E	5800

Crooked River

Number	Name	Sec.	Twp.	Rge.	Elev.
19E3MP	Derr	14	13S	23E	5670
20E1MP	Marks Creek	25	12S	19E	4540
20E2	Ochoco Meadows	21	13S	20E	5200
19F1M	Snow Mountain	1	19S	26E	6300
19E4	Tamarack	8	15S	25E	4800

HOOD, MILE CREEKS LOWER DESCHUTES WATERSHEDS (6)

Hood River

Number	Name	Sec.	Twp.	Rge.	Elev.
21D6P	Brooks Meadows	2	2S	10E	4300
21D25M	Cooper Spur	6	2S	10E	3490
21D1	Greenpoint Reservoir	28	2N	9E	3400
21D20	Knebal Springs	31	1S	11E	3850
21D23	Parkdale	6	1S	10E	1770
21D8 *	Phlox Point	6	3S	9E	5600
21D4	Red Hill	20	1S	9E	4400
21D9	Still Creek	25	3S	8½E	3700
21D7	Tilly Jana	15	2S	9E	6000
21D21	Ulrich Ranch Junction	28	1S	11E	3350
21D30	Umbrella Falls	3	3S	9E	5400
21D24	Upper Valley	20	1S	10E	2530
21D28	Switchback	28	1S	9E	3255

Mile Creeks - Mosier Creek

Number	Name	Sec.	Twp.	Rge.	Elev.
21D6P	Brooks Meadows	2	2S	10E	4300
21D20	Knebal Springs	31	1S	11E	3850
21D21	Ulrich Ranch Junction	28	1S	11E	3350

Lower Deschutes River

Number	Name	Sec.	Twp.	Rge.	Elev.
21D12	Clear Lake	29	4S	9E	3500
21D22	Clear Lake Experimental	29	4S	9E	3500
21E6	Hogg Pass	24	13S	7½E	4755

LOWER COLUMBIA WATERSHEDS (7)

Sandy River

Number	Name	Sec.	Twp.	Rge.	Elev.
21D8	Phlox Point	6	3S	9E	5600
21D9	Still Creek	25	3S	8½E	3700

WILLAMETTE WATERSHEDS (8)

Clackamas River

Number	Name	Sec.	Twp.	Rge.	Elev.
21D15	Big Bottom	25	6S	7E	2118
21D13	Clackamas Lake	35	5S	8½E	3400
21D12	Clear Lake	29	4S	9E	3500
21D16	Lake Harriet	4	6S	7E	2045
21D14 *	Peavine Ridge	14 & 15	6S	7E	3500
21D8 *	Phlox Point	6	3S	9E	5600
21D9	Still Creek	25	3S	8½E	3700
21D17	Timothy Lake	26	5S	8E	3295

Santiam River

Number	Name	Sec.	Twp.	Rge.	Elev.
22E1	Detroit (town)	1	10S	5E	1610
22E2	Detroit Dam	7	10S	5E	1580
21E6	Hogg Pass	24	13S	7½E	4755
21E4	Marion Forks	28	11S	7E	2730
22E3	Mill City	29	9S	3E	826
21E5	Santiam Junction	14	13S	7E	3790
21E3	Whitewater Bridge	28	10S	7E	2175

McKenzie River

Number	Name	Sec.	Twp.	Rge.	Elev.
21E8	Dead Horse Grade	13	16S	7E	3800
22E4	Lost Creek Ranch	24	16S	6E	1956
21E7	McKenzie	35	15S	7½E	4800
22E5	McKenzie Bridge	13	16S	5E	1372
22E6	Vida	28	16S	2E	800
21E9	White Branch Slide	15	16S	7E	2200

Middle Fork Willamette River

Number	Name	Sec.	Twp.	Rge.	Elev.
22F3	Cascade Summit	7	23S	6E	4880
22F6	McCredie Springs	36	21S	4E	2120
22F8	Meridian Dam	13	19S	1W	750
22F7	Oakridge	16	21S	3E	1310
22F5	Railroad Overpass	21	22S	5E	2750
22F4	Salt Creek Falls	32	22S	5½E	4000
22F2P	Waldo Lake	15	21S	6E	5500
22F14 *	Willamette Pass	33	24S	5½E	5600

Coast Fork Willamette River

Number	Name	Sec.	Twp.	Rge.	Elev.
22F9	Champion	12	23S	1E	4500
22F10	Golden Curry Creek	1	23S	1E	3136
22F13	Layng Creek R. S.	31	21S	1E	1200
22F12	Lund Park	22	22S	1E	1740
22F11	Weaver Creek	35	22S	1E	2440

Mary's River

Number	Name	Sec.	Twp.	Rge.	Elev.
23E1	Mary's Peak	21	12S	7W	3620

ROGUE, UMPQUA WATERSHEDS (9)

Rogue River

Number	Name	Sec.	Twp.	Rge.	Elev.
23G4	Althouse	17	41S	7W	4530
22G6	Annie Spring	19	31S	6E	6018
22G28	Beaver Dam Creek	1	38S	4E	5100
22G21P	Big Red Mountain	31	40S	1W	6500
22G13	Billie Creek Divide	30	36S	5E	5300
22G30	Caliban	16	40S	1E	6500
22G27	Deadwood Junction	8	38S	4E	4600
22F19	Diamond-Crater Summit	34	28S	6E	5800
22G14P	Fish Lake	3	37S	4E	4865
22G12	Fourmile Lake	9	36S	5E	6000
23G3	Grayback Peak	9	40S	5W	6000
22G26	Howard Prairie	32	38S	4E	4500
22G16	Hyatt Prairie Reservoir	15	39S	3E	4900
23G8	King Mountain No. 1	8	33S	4W	4800
23G9	King Mountain No. 2	33	32S	4W	3646
23G10	King Mountain No. 3	29	32S	4W	2550
23G11	King Mountain No. 4	20	33S	4W	1779
22G22	Little Red Mountain	25	40S	2W	6500
22G31	Mt. Ashland Switchback	15	40S	1E	6400
23G5	Page Mountain	8	41S	7W	4045
22G5	Park Headquarters	8	31S	6E	6450
22G10P	Seven Lakes No. 1	3	34S	5E	6800
22G11	Seven Lakes No. 2	26	33S	5E	6200
22G2	Silver Burn	30	30S	4E	3720
22G20	Siskiyou Summit	17	40S	2E	4630
22G32	Ski Bowl Road	22	40S	1E	6000
22G9	South Fork Canal	12	33S	3E	3500
22G1	Whaleback	3	31S	2E	5140

Umpqua River

Number	Name	Sec.	Twp.	Rge.	Elev.
22F9	Champion	12	23S	1E	4500
22F18P	Diamond Lake	29	27S	6E	5315
23G7	Eden Valley Summit	10	32S	10W	2390
22F16	North Umpqua	19	26S	6E	4215
22F23	Red Butte No. 1	36	27S	2W	4560
22F24	Red Butte No. 2	30	27S	1W	4000
22F25	Red Butte No. 3	30	27S	1W	3500
22F26	Red Butte No. 4	36	27S	1W	3000
22F27	Red Butte No. 5	20	27S	1W	2500
22F28	Red Butte No. 6	17	27S	1W	2000
22F17	Trap Creek	1	27S	4E	3800
22G1	Whaleback	3	31S	2E	5140
22F15	Windigo Pass	20	25S	6E	5800

KLAMATH WATERSHEDS (10)

Klamath River

Number	Name		Sec.	Twp.	Rge.	Elev.
22G6	Annie Spring		19	31S	6E	6018
22G13	Billie Creek Divide		30	36S	5E	5300
21G5	Bly Mountain		15 & 22	37S	11E	5000
21F11	Chemult		21	27S	8E	4760
22G24	Cold Springs Camp		12	35S	5E	6100
20G12a	Crazyman Flat		9	34S	15E	6100
20H2a	Crowdor Flat	(Cal)	30	47N	11E	5200
22F19	Diamond-Crater Summit		34	28S	6E	5800
21F18	Diamond Lake Jct. (97)		1	29S	7E	4600
21G6a	Dog Hollow		1	40S	14E	4900
20G14a	Finley Corrals		11	36S	16E	6000
22G12	Fourmile Lake		9	36S	5E	6000
21G4P	Gerber		12	39S	13E	4850
22G16	Hyatt Prairie Reservoir		15	39S	3E	4900
22G26	Howard Prairie		32	38S	4E	4500
22G15	Lake of the Woods		11	37S	5E	4960
22G5	Park Headquarters		8	31S	6E	6450
22G25	Pelican Guard Station		9	36S	6E	4150
20G6MP	Quartz Mountain		2	38S	16E	5320
22G10P	Seven Lakes No. 1		3	34S	5E	6800
22G11	Seven Lakes No. 2		26	33S	5E	6200
20H1a	State Line	(Cal)	21	48N	11E	5750
20G9AP	Strawberry		4	40S	16E	5760
20G2AP	Summer Rim		15	33S	16E	7200
21G2	Sun Mountain		22	32S	7½E	5350
20G13a	Sycan Flat		25	31S	14E	5500
21G3	Taylor Butte		22	33S	11E	5100

Pacific Power and Light Company's Snow Stations

Number	Name	Sec.	Twp.	Rge.	Elev.
1	Beatty (PP&L)	22	36S	12E	4300
10	Bly 101 Ranch (PP&L)	22	35S	14E	4800
3	Chiloquin (PP&L)	34	34S	7E	4187
4	Crystal (PP&L)	26	34S	6E	4200
5	Fort Klamath (PP&L)	22	33S	7½E	4150
6	Kirk (PP&L)	1	33S	7E	4533
9	Quartz Mountain (PP&L)	33	37S	16E	5504
8	Harriman Lodge (PP&L)	3	36S	6E	4200
12	Yamsay (PP&L)	20	31S	11E	4600

LAKE COUNTY, GOOSE LAKE WATERSHEDS (11)

Goose Lake

Number	Name		Sec.	Twp.	Rge.	Elev.
20G15a	Bear Flat Meadow		27	36S	19E	5900
20G8MP	Camas Creek		5	39S	21E	5720
20G11a	Cox Flat		16	37S	18E	5750
20G16a	Crane Mountain		13	40S	21E	6020
20H2a	Crowder Flat	(Cal)	30	47N	11E	5200
20H3a	Dismal Swamp	(Cal)	31	48N	16E	7200
20G17a	Patton Meadow		28	38S	18E	6800
20G6MP	Quartz Mountain		2	38S	16E	5320
20H1a	State Line	(Cal)	21	48N	11E	5750
20G9AP	Strawberry		4	40S	16E	5760

Abert Lake

Number	Name	Sec.	Twp.	Rge.	Elev.
20G15a	Bear Flat Meadow	27	36S	19E	5900
20G18AP	Colvin Creek	12	36S	21E	6550
20G11a	Cox Flat	16	37S	18E	5750
20G14a	Finley Corrals	11	36S	16E	6000
20G4	Mill Creek	1	34S	17E	6200
20G6MP	Quartz Mountain	2	38S	16E	5320
20G10a	Sherman Valley	15	37S	21E	6600

Summer Lake

Number	Name	Sec.	Twp.	Rge.	Elev.
20G2AP	Summer Rim	15	33S	16E	7200

Silver Lake

Number	Name	Sec.	Twp.	Rge.	Elev.
21F12P	Silver Creek	25 & 26	29S	13E	4900
20G13a	Sycan Flat	25	31S	14E	5500

Warner Lake

Number	Name		Sec.	Twp.	Rge.	Elev.
20G8MP	Camas Creek		5	39S	21E	5720
20G16a	Crane Mountain		13	40S	21E	6020
20H3a	Dismal Swamp	(Cal)	31	48N	16E	7200
19G1a	Hart Mountain		1	36S	25E	6350
20G10a	Sherman Valley		15	37S	21E	6600

Guano Lake

Number	Name		Sec.	Twp.	Rge.	Elev.
19H1	Bald Mountain	(Nev)	17	45N	21E	6720
19G1a	Hart Mountain		1	36S	25E	6350
19H4a	Little Bally Mt.	(Nev)	8	45N	19E	6600

HARNEY BASIN WATERSHED (12)

Silvies River - Silver Creek

Number	Name	Sec.	Twp.	Rge.	Elev.
18F7a	Call Meadow	29	20S	33E	5340
19F2	Delintment Lake	28	19S	26E	5600
19F3	Emigrant Butte	14	21S	27E	5000
18F3P	Idlewild Camp	27	20S	31E	5200
19E9P	Izee Summit	28	16S	29E	5293
18F1	Rock Spring	23	18S	32E	5100
19F1M	Snow Mountain	1	19S	26E	6300
19E7M	Starr Ridge	20	15S	31E	5150
18F4MP	Stinking Water	33	21S	34E	4800
19F4m	Willow-Bald	19	22S	29E	5000

Donner Und Blitzen River

Number	Name	Sec.	Twp.	Rge.	Elev.
18F6a	Buck Pasture	21	29S	35E	5700
18G2MAP	Fish Creek	4	33S	32¾E	7900
19G1a	Hart Mountain	1	36S	25E	6350
18G1MA	Silvies	35	32S	32¾E	6900
18G7a	"V" Lake	31	35½S	32¾E	6600

Trout and Whitehorse Creeks

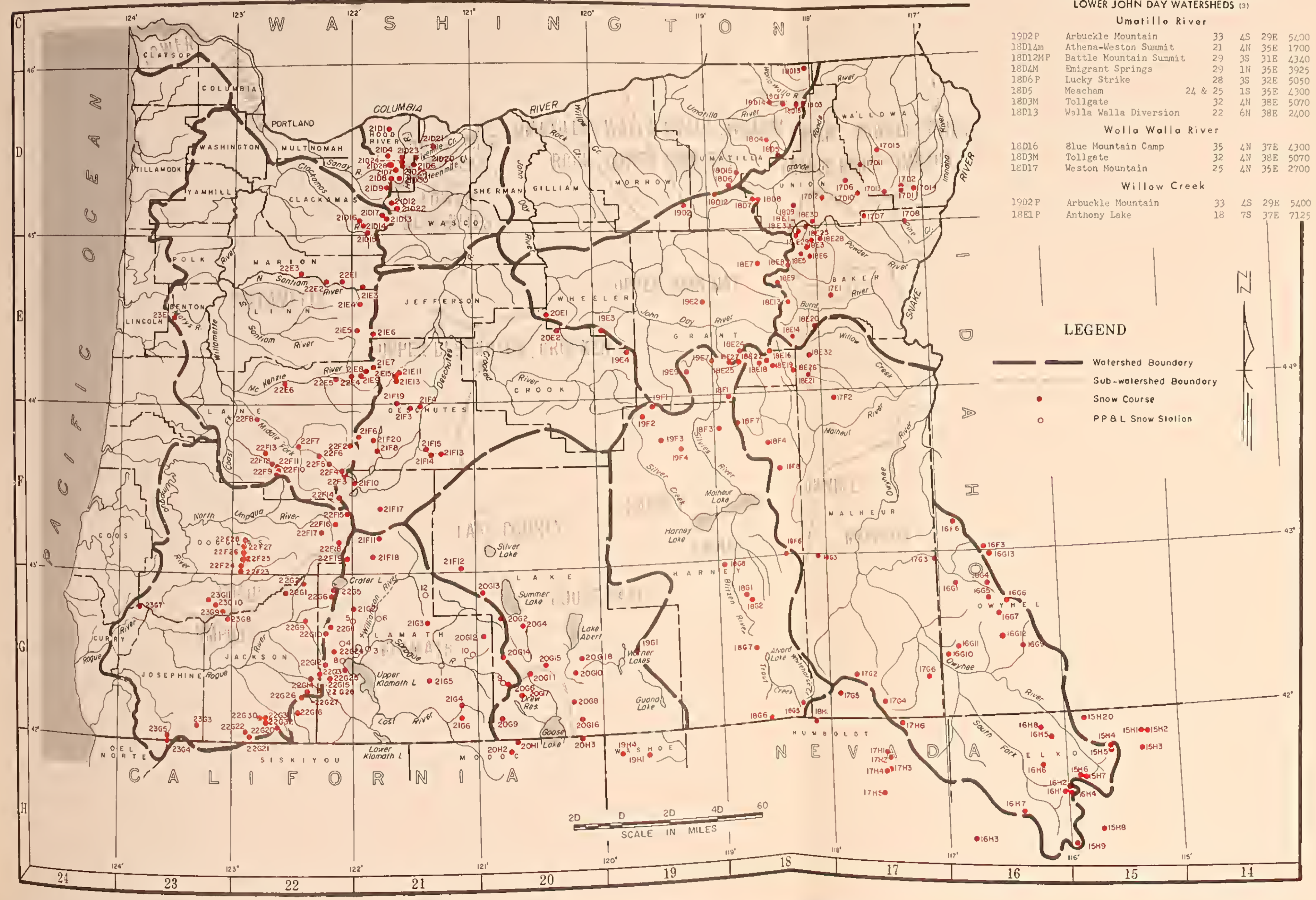
Number	Name		Sec.	Twp.	Rge.	Elev.
18G6a	Denio Creek		14	41S	34E	6000
18H1	Disaster Peak	(Nev)	8	47N	34E	6500
17G5a	Oregon Canyon		9	40S	40E	6950
18G5a	Trout Creek		10	41S	38E	7800

Harney Lake

Number	Name	Sec.	Twp.	Rge.	Elev.
18G8a	Buckskin Lake	2	30S	30E	5200

LEGEND

19D2	SNOW COURSE ONLY
19D2M	SNOW COURSE AND SOIL MOISTURE
19D2MA	SNOW COURSE, SOIL MOISTURE AND AERIAL MARKER
19D2A	SNOW COURSE AND AERIAL MARKER
19D2m	SOIL MOISTURE ONLY
19D2a	AERIAL MARKER ONLY
19D2P	SNOW COURSE AND PRECIPITATION GAGE
19D2p	PRECIPITATION GAGE ONLY
*	RADIO TELEMETRY



Map and Index to OREGON SNOW COURSES

U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE USDA-SCS-PORTLAND, OREG 1965 M-1874

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The Following Organizations Cooperate in the Oregon Snow Survey Work

STATE
- Idaho Cooperative Snow Surveys
- Nevada Cooperative Snow Surveys
- Oregon State University
- Oregon State Engineer and Corps of State Watermasters
- Oregon State Highway Engineers
- Soil and Water Conservation Districts of Oregon

COUNTY
- Douglas County Water Resources Survey

FEDERAL
- Department of Agriculture
  - Cooperative Extension Service
  - Forest Service
  - Soil Conservation Service
- Department of Commerce
  - Weather Bureau
- Department of the Interior
  - Bonneville Power Administration
  - Bureau of Land Management
  - Bureau of Reclamation
  - Fish and Wildlife Service
  - Geological Survey
  - National Park Service
- Department of National Defense
  - Corps of Army Engineers

PUBLIC UTILITIES
- Pacific Power and Light Company
- Portland General Electric Company
- California-Pacific Utilities Company

MUNICIPALITIES
- City of Baker
- City of La Grande
- City of The Dalles
- City of Walla Walla

IRRIGATION DISTRICTS
- Arnold Irrigation District
- Associated Ditch Companies
- Burnt River Irrigation District
- Central Oregon Irrigation District
- East Fork Irrigation District
- Grants Pass Irrigation District
- Hood River Irrigation District
- Jordan Valley Irrigation District
- Juniper Flat Irrigation District
- Lakeview Water Users, Incorporated
- Medford Irrigation District
- Middle Fork Irrigation District
- North Board of Control - Owyhee Project
- North Unit Irrigation District
- Ochoco Irrigation District
- Rogue River Valley Irrigation District
- South Board of Control - Owyhee Project
- Squaw Creek Irrigation District
- Talent Irrigation District
- Tumalo Project
- Vale-Oregon Irrigation District
- Warmsprings Irrigation District

PRIVATE ORGANIZATIONS
- Amalgamated Sugar Company
- The Crag Rats, Hood River, Oregon

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